THROUGH TIMBUCTU
AND
ACROSS THE GREAT SAHARA

Through Timbuctu and Across the Great Sahara.

An Account of an Adventurous Journey of Exploration from Sierra Leone to the Source of the Niger, and thence across the Great Sahara to Algiers. By Captain A. H. W. HAYWOOD, F.R.G.S., Royal Artillery. With 41 Illus. & Map. Demy 8vo, 16s. net.

The Tailed Head-Hunters of Nigeria.

An Account of an Official's 7 Years' Experiences in the Northern Nigerian Pagan Belt, & some Description of the Manners, Habits, & Customs of the Native Tribes. By Major A. J. N. TREMEARNE, B.A. (Cantab.), F.R.G.S., F.R.A.I. With 38 Illus. & Map. Demy 8vo, 16s. net.

My Adventures among South Sea Cannibals.

An Account of the Experiences and Adventures of a Government Official among the Natives of Oceania. By DOUGLAS RANNIE. With 39 Illustrations and a Map. Demy 8vo, 16s. net.

Among the Eskimos of Labrador.

A Record of 5 years' Close Intercourse with Labrador Tribes. By SAMUEL KING HUTTON, M.B., Ch.B. Vict. With 47 Illustrations and 2 Maps. Demy 8vo, 16s. net.

Fore and Aft.

The Story of the Fore and Aft Rig from the Earliest Times. By E. KEBLE CHATTERTON, Author of "Sailing Ships and their Story," &c. With 150 Illus. Sq. Ex. Royal 8vo, 16s. net.

"Cannot but have a great fascination; absolutely exhaustive."—*Liverpool Post.*

The Making of a Great Canadian Railway.

The Story of the Construction of the G.T.P. Railway. By F. A. TALBOT. With 43 Illustrations and a Map. Demy 8vo, 16s. net.

"Most enchantingly described."—*Pall Mall Gazette.*

Second Edition.

An Unknown People in an Unknown Land.

The Life and Customs of the Lengua Indians of the Paraguayan Chaco, with Adventures and Experiences met with during Twenty Years' Pioneering and Exploration amongst them. By W. BARBROOKE GRUBB. With 60 Illus. & a Map. Demy 8vo, 16s. net.

"A remarkable volume . . . of great value and excellently illustrated."—*Contemporary Review.*

Second Edition.

Among the Rajahs and Ryots of Northern India.

By Sir ANDREW H. L. FRASER, K.C.S.I., M.A., LL.D., Ex-Lieut.-Governor of Bengal. With 34 Illus. & a Map. Medium 8vo, 18s. net.

"Will take its place with the great standard authorities on our Indian Empire."—*British Weekly.*

SEELEY, SERVICE & CO. LTD.

HOGGAR TUAREGS NEAR AHNET WELLS

These curious veiled people of the Sahara are said to have been driven out of North Africa many centuries ago. They were forced south into the desert, where they have ever since remained, seemingly preferring this lonely existence to contact with a more civilized world. The "litham," or veil, covering the face is primarily designed to keep out the choking desert sand.

THROUGH TIMBUCTU
AND
ACROSS THE GREAT SAHARA

AN ACCOUNT OF AN ADVENTUROUS JOURNEY OF EXPLORATION FROM SIERRA LEONE TO THE SOURCE OF THE NIGER, FOLLOWING ITS COURSE TO THE BEND AT GAO AND THENCE ACROSS THE GREAT SAHARA TO ALGIERS

BY

CAPTAIN A. H. W. HAYWOOD, F.R.G.S.
Royal Artillery

WITH 45 ILLUSTRATIONS & A MAP

LONDON
SEELEY, SERVICE & CO. LIMITED
38 GREAT RUSSELL STREET
1912

DT
333
H33t

CONTENTS

CHAPTER I

PAGE

Reasons for the journey—Selecting a servant—Preparations—The Sierra Leone Railway 17

CHAPTER II

Bush scenery—A night at Bo—The Frontier Force at Daru—Mendi and Kissy carriers—Cotton-growing—Secret societies—Poro and Bundu societies—Marriage customs—The Liberian frontier 23

CHAPTER III

Shooting in the grass-country—An unfortunate mishap—Doubtful pleasures of a journey—Sources of the Niger—A curious frontier rock—Bush fires—Bird life 34

CHAPTER IV

The Harmatan—Native burial rites—Koranko superstitions—The Anglo-French frontier—Solitude of a Customs post—A change of scenery—Smuggling—A change of carriers—Intoxicating liquor—The Upper Niger—A splendid spectacle—A good highway—Native music 42

CHAPTER V

Faranah—The Malinkés—Castes—Big game on the Mafou River—Native methods of hunting—Trapping—Ground nuts—The native trader—Kouroussa—Native types—French gardens—Native dances—Beehives—Fruit 55

CHAPTER VI

Samory and the Sofas—The Sofa wars—Desertion of my "boy"—Kouroussa and Kankan—Native horses—An inhospitable reception—Kankan—Trade at Kankan—The rubber vine—Native telegraphy—Personal adornment 67

895345

CHAPTER VII

Hippopotami—Game in the Wasulu country—Lazy carriers—In pursuit of elephants—Fetish haartebeest—"Red" elephants—A fetish altar—Braimah's juju—Charms and tests . . 78

PAGE

CHAPTER VIII

Mamadu's new hat—Tribal marks—Unreliable guides—A lonely prospector—Bolting carriers—A local chief—More trouble with carriers—Hunting eland—Sand-flies and mosquitoes—The headman's duty—Undesirable presents—Jomongonas—A magnificent view—Jilingé—Gold—Superstition of the River Fie—A Niger ferry—An unappreciated delicacy—Fishing on the Niger 89

CHAPTER IX

Kob—A West African road—Characteristics of the Moors—The influence of Islam—The French Soudan—Kangaba—Hospitality—A picturesque market—Vexatious delays—African punctuality—A new acquaintance—Uncomfortable marching—Shea-butter—Its uses—A native toothbrush—Arrival at Bamako . . 106

CHAPTER X

Bamako—The Bambaras—An animated scene—The Kati Plateau—Dinner with the Governor—Government House—Game in the "Bend" of the Niger—The Senegal-Niger Railway—Bamako market—The hotel 120

CHAPTER XI

Koulikoro—Niger Navigation Service—Rapids on the Niger—The Hourst Expedition—An explorer's death—Horse-breeding . 133

CHAPTER XII

On a river launch—Salutations—Crocodiles—An evening halt—Camping on the bank—Tobacco-growing—Cotton-growing—Garrison mess life—Irksome travelling—An enlightened ruler—An excellent shooting-ground—A holy city—Kadis—Architecture—Sails of grass—Picturesque pilots—A strike in the engine-room—Flat country 143

CHAPTER XIII

A land of inundations—River transport in the Macina Province—The "King of Mopti"—Mopti—Prospects of the rice trade—Shooting wart-hog—Native huts—The protection of egrets—A lion as a pet—A dangerous joke—Scarcity of wood—The white ant—The driver ant . . . . . PAGE 157

CHAPTER XIV

Fulani cattle—Lake Dhebo—Duck shooting—Teal—A tough bird—The Niger River winds—Towing a barge—Niafounké—The edge of the Sahara—Stalking birds—Sheep-farming—Developing the wool trade—Raided by a leopard—Ostrich-farming . 171

CHAPTER XV

Game on the Issa-Ber—Hiring a canoe—A leaky craft—Borgou grass—Fish tanks—Sebi—Tracks of lions—Good wildfowl shooting—Tortures of a native saddle—Mamadu's horsemanship—A flat country—Fulani villages—Saraféré—Desert winds—Niger canoes—Hardy hunters—Ancient fire-arms—Lion shooting—The Fulanis 184

CHAPTER XVI

Land near the Bara-Issa—Tuaregs—A salt caravan—Stalking hartebeest—Lake Niangaye—The village of Kanioumé—My runaway horse—Tracking elephants—Elephants bathing—A stampede of elephants—A wounded elephant—Cave dwellers—Sandstorms and rifles 201

CHAPTER XVII

Bullocks—Pelicans on Lake Niangaye—Stalking ostriches—Friendly Tuaregs—Lakes and swamps—By canoe to Timbuctu—An intricate route—Horses of the Sonrhais—Kabara—Timbuctu—A quaint desert city—A change of route—A steel canoe—Yakubu—Explorers—Réné Caillé—Barth—Scenes in Timbuctu—The Sonrhay empire—Mosques—Salt trade—Saharan sirocco—Desert caravans 217

CHAPTER XVIII

Preparing to cross the desert—Articles for barter—My barge—My new "boy"—My crew—Stranded—A miserable people—"Cram-cram"—Borgou—Bamba—Under sail—A variety of game—The defile of Tosaye—The "Oued Telemsi"—A curious coloured clay—Gao—A lazy class—Mosques at Gao—A perilous journey—Giraffe . . . . . PAGE 233

CHAPTER XIX

Loading a camel—Water vessels—My camels—My caravan—Nomads of the Sahara—Vegetation of the desert—Country of the Kountahs—Line of wells—Rainfall—My tent—Gazelle—Fowls of the desert—A trying march—Ill-used animals—How to mount a camel—Moroseness of the camel—Vagaries of the camel—An unpleasant feature—Uncomfortable riding . . 248

CHAPTER XX

An unreliable guide—Relief—Typical scenery—Game in the "oueds"—A dreary scene—The effect of the sun—A breakdown—Kidal—Reorganization—A veiled people—The Iforas—Tuaregs and Iforas—Iforas as camel-masters—Adrar—I abandon my bath—The value of dates—French couriers—A solitary post—Relics of the Stone Age—Relics of former nations . 263

CHAPTER XXI

The camel's reserve store—Variations of temperature—The Sahara by moonlight—Halley's Comet—Wells of Abeibera—Tea in the desert—Difficult bargaining—Enduring donkeys—Saharan game—A dry well—Missing camels—In Ouzel—An indifferent boundary—Unpleasant recollections—A change in the desert—Saharan shrubs—Welfare of the camel 279

CHAPTER XXII

The dreaded Tanezrouft—Camel saddles—The wells of Timissao—A valuable plant—A night march—An improvised shelter—Sandstorms—Enemies to sleep—Gloomy scenery—The water supply—An exhausting struggle—The wells of Ahnet—Instinct of the guides—Protecting the water-skins 294

CHAPTER XXIII

The Ahnet or Western Hoggar—A bad reputation—Tuareg highwaymen—A salt well—A barren region—We reach Insalah—A dramatic entrance—Colonel Laperine—Insalah—Its importance—Resources—Artesian wells—Varieties of dates—Pasturage—The streets 310

CHAPTER XXIV

Disturbing news—*En route* for Algiers—A remarkable man—Horses at Insalah—Hospitality of French officers—Slavery amongst the Arabs—An unusual sight—A pathetic story—My own valet and cook—A precipitous track—The "Great Erg"—Hassy Inifel—An incompetent guide—Lost—A useful camel-driver—A hospitable Arab chief—An unappetizing menu—The dates of Ouargla—Touggourt—A ramshackle coach—Biskra . . . 322

CHAPTER XXV

By rail to Algiers—A difficult project—The resources of the Sahara 333

Appendix 341

Index 343

LIST OF ILLUSTRATIONS

	FACE PAGE
Hoggar Tuaregs	*Frontispiece*
Barracks of the W.A.F.F. at Daru	24
River Moa, Sierra Leone	24
Baro Village	60
Native types at Kankan	74
M. Louis Novella at Sarafinian	100
A Senafou Native	100
Natives pounding rice at Tombola	108
The spread of Islam in the Western Soudan	112
The Railway Station and Hotel at Bamako	122
The Niger at Bamako	122
The Niger at Koulikoro	134
The Niger at Ségou	134
The Launch "Réné Caillé"	152
Steel Canoes on the Upper Niger	152
Mopti	160
A Captive Lioness at Mopti	166
Bambara Hunters	194
Canoes on the Bara-Issa	196
Women pounding rice	202
Fulanis at Bambara-Maaundé	206
Timbuctu	220
A scene outside the walls of Timbuctu	224
The departure from Gao	250
A Tuareg Herd, In Ouzel	254

FACE PAGE

The Wells of Tabankhor 258

A snapshot of the "King of Beasts" 258

My Kitchen in the Desert 264

The Sergeant of Tirailleurs 268

Méhariste Camels out at pasture 272

The Wells of Kidal 276

Sheep at the Wells of Bourassa 286

Tuareg hovels at In Ouzel 286

My Riding-Camel in the Sahara 290

My servant Musa in the Sahara 302

My Arab Guide Mahomed 306

Arab and Tuareg 312

Insalah Oasis 316

The Artesian Well of El Barka 318

The Market-place, Touggourt 318

The Spring of El Guettera 324

The Oasis of Ouargla 328

The Residency at Touggourt 332

Chamba Arabs at Touggourt 332

The Mosques at Ouargla 334

THROUGH TIMBUCTU AND ACROSS THE GREAT SAHARA

CHAPTER I

Reasons for the journey—Selecting a servant—Preparations—The Sierra Leone Railway.

AFRICA, like India, seems often to cast a spell over those who visit it, and certainly at the end of 1909 I found myself under this curious fascination. I had spent some years soldiering in West Africa, and had often wished to explore the ramifications of the Upper and Middle Niger, but the difficulty of obtaining sufficient leave had been an insurmountable obstacle. My chance came at last, however, when I found myself quartered at Freetown, the capital of our British colony of Sierra Leone, and due for six months' leave.

I determined to spend my furlough in a journey down the river from its source, making shooting excursions at suitable points in its basin, and directing my steps towards Timbuctu. From Timbuctu I proposed to cross the Sahara Desert, striking almost due north for Algiers. The strange tales I had often heard of this desert and the curious wandering tribes who inhabit it, interested me and made me wish to ascertain for myself the truth of them.

The first thing to be done was to get leave. In due course this was obtained, and at the same time I was informed that the French officials along my route had been told to offer me every facility for my journey.

In the meantime I had not been idle, as I was well aware of the time required before official sanction would be received. I had calculated the kind and amount of stores necessary, and these with my ammunition were on their way out from England.

In the Niger valley almost every kind of West African game is to be found, including elephant, lion and giraffe. My armament consisted of a ·303 magazine sporting Lee-Speed rifle, a ·450 Cordite Express and a 12-bore shot-gun. I took good care to be amply provided with ammunition, not only for sporting purposes, but also for self-defence, as my journey was not wholly without danger. I calculated on getting a good supply of fresh meat by my gun, and so my stores consisted chiefly of such articles as flour, tea, jam and some soups. I reckoned that the journey would take about five months, and had sufficient supplies to last me that time.

One of the chief difficulties was to find a servant who could speak the requisite languages and who was willing to accompany me to Algiers. In West Africa the language problem is always a difficult one. Tribes are so numerous, and all speak different languages. In many cases these languages bear not the slightest resemblance to one another, and are exceedingly hard to acquire. By a stroke of good fortune I succeeded in procuring a Susu native, who had a fair idea of cooking for white men, and according to himself, "saveed plenty all the talk master want." This, being interpreted into plain English, meant that he could speak fluently the languages I required. Having had some experience of the West African negro and his capacity for lying without turning a hair, I took the precaution to put him to the test. He was made to discourse at some length with a Malinké and a Bambara, these being the two languages most necessary, and as he acquitted himself fairly satisfactorily, I engaged him forthwith. After cross-

ing the French frontier these two languages were those most widely spoken until I should enter the Sahara. Here only Tuaregs and Arabs would be met with. I had a sufficient colloquial knowledge of Arabic for practical purposes. Further, I knew that at the big French centres I could always procure an interpreter if necessary; at the same time I wished if possible to avoid having any dealings with these gentry, as they have gained a not undeserved reputation for being first-class rogues, who, in the name of their masters, extort presents from the ignorant natives of the villages through which one passes.

In West Africa baggage is made up in loads not exceeding sixty pounds, and is carried by native porters on their heads. Consequently all my possessions had to be arranged in a manner suitable for this kind of transport. Most West African "bush paths" are not more than three or four feet wide at most, hence carriers have to walk in Indian file; indeed, so accustomed are they to this mode of progression that even where Government has built wider roads, they can never be induced to walk otherwise than one behind the other. As paths are usually so narrow, being enclosed on each side by dense bush, loads, besides not being too heavy, must not be too bulky. I had altogether fourteen carrier's loads. My plan was to follow the Sierra Leone Railway to its terminus at Pendembu, where I arranged to pick up my carriers.

One of my chief difficulties was to arrange for money on the journey. To carry a large sum, such as would be required for the whole expedition, on my person or in my baggage, would be highly imprudent, and only act as a tempting bait to the numerous thieves and highwaymen who are always met with in these countries. There was the further complication of requiring English and French money. After some trouble I settled with a French firm at Freetown for drafts payable at two different places on

my route, and a further draft to be paid at Marseilles. I was the more easily able to arrange this as, after leaving Sierra Leone, the whole of my journey would be through French possessions.

As it would be impossible for mails to reach me, I resigned myself, not altogether regretfully, to being without letters for the next five or six months. At last my preparations were complete, and on the 6th of January I left Tower Hill Barracks to catch the seven o'clock morning train from Freetown for Bo, where a halt is made the first night. It was with feelings of joy at getting away from civilization, and the delightful pleasure of knowing I should spend the next few months in close contact with all the beauties of nature, that I set forth that glorious tropical morning. It is somehow easier to cast aside the gnawing cares of the world when one is alone with nature. In tropical Africa nature is so beautiful that the most unimaginative being can hardly fail to be stirred by her fascinating charms and forget for the time the existence of sordid civilization.

The scene that met my eye at the station was a busy and amusing one. Most of the people present were the so-called Creoles. These people are the inhabitants of Freetown who have become civilized more or less, and are fond of aping the European dress and customs. The young men wear stiff collars and starched shirts with the gaudiest ties and handkerchiefs imaginable, while the ladies vie with one another in the brightness of the hues of their frocks. On their heads they wear the most brilliant coloured handkerchiefs, and this is the prettiest part of their dress. The crowd around the little train is so great that it is only with considerable difficulty that one is able to approach one's carriage. Everyone is talking at the same time, so the noise is deafening. It must be understood that not one-tenth part of this crowd is going in the

train, most of them are only idle spectators. The departure of the train is always a great excitement for the Sierra Leone native and invariably attracts a large and fashionable mob. At last all preparations are complete, the guard blows his whistle, those who are passengers are unceremoniously bundled into the train, whilst the spectators are as unceremoniously bundled out of the way, and amidst final good-byes from the assembly on the platform we steam out of the station.

The babel of voices having ceased, comparative quiet now reigns, and at last I have a chance of collecting my thoughts and observing my fellow-travellers. We are three in my compartment, all going together as far as Bo. Each of us is provided with an ample "chop-box," or luncheon-basket. In West Africa it is a well-established maxim never to get separated from two articles: namely, one's bedding with mosquito curtain, and one's "chop-box." These two things are most necessary to one's comfort, if not to one's existence. Without the bed and mosquito curtain you will be devoured by mosquitoes, with the almost certain result of a bad dose of fever. Without the box of provisions one runs the risk of starvation.

One of my companions is a trader, who is going up-country to investigate the advisability of starting a new store in a district recently opened up by the railway. The Sierra Leone line has done much to increase the trade of the colony and hinterland during the past few years. Trade in palm kernels and ground nuts is brisk, and the railway has quite as much as it can do to cope with the goods traffic.

The other is a bank official going to Bo on some duty connected with his bank, which has large interests in the protectorate.

The Sierra Leone Government Railway is a line of narrow gauge running almost due east from Freetown for

220 miles. Its terminus is at Pendembu, close to the Liberian frontier. Officially the railway ends at Baiima, 212 miles from the capital of the colony, the last eight miles being called a tramway, but practically there is no difference between the railway and the tramway, and both are of identical gauge. There is also a tramway running from Boia into the Yonni country. Trains run three times a week in both directions. Travelling is not comfortable judged by the standard of English railways, the compartments are small, the seats of the carriages are uncommonly hard, and the line is roughly laid. But greater comfort will no doubt come in time, and it is an undoubted boon for the traveller to have a railway of any description ; in the olden days these 200 odd miles used to take him fourteen or fifteen days with carriers instead of only two.

CHAPTER II

Bush scenery—A night at Bo—The Frontier Force at Daru—Mendi and Kissy carriers—Cotton-growing—Secret societies—Poro and Bundu societies—Marriage customs—The Liberian frontier.

THE country of Sierra Leone consists of two parts: the colony and the protectorate. The colony is mountainous, and runs out in a peninsula from the protectorate or hinterland. Roughly speaking, the colony is the civilized part, and the protectorate is in West African parlance the "Bush." In the peninsula a quantity of ginger is grown, and through these plantations the train wends its way for some twenty miles. On the left is the Sierra Leone or Bunce River, and on the east is a rocky range of hills. After leaving the colony the line runs for about 120 miles through typical West African "bush" scenery to Bo. For those who have never seen it it may be of interest to say a few words about the West African "bush." It generally consists of a tangled mass of small trees and undergrowth, never more than some thirty feet high, so thick that it is impossible to see more than two or three yards inside it, and so dense that without cutting a path it is not possible to force one's way through it. This bush is often the haunt of the smaller species of wild game, such as cerval cats, bush pigs and small antelope; but these are difficult to see, and still more difficult to shoot on account of the thickness of the foliage. Every three to five years the bush is cut by its owner, for all bush-land has a proprietor, who will make himself known soon enough if

anyone else attempts to appropriate his particular piece of land. The landlord then clears the ground and makes a farm, planting rice, ground nuts, or whatever is suited best to that locality. This clearing process is often considerably helped by first burning the undergrowth. Bush fires for this purpose are started in January or February, when the vegetation has been dried by the hot tropical sun and by the dry winds called "Harmatan," which blow about this time of year. After getting his crops from the land the native allows the bush to grow up once more, and so rapid is this growth in the luxuriant damp atmosphere, that in a few months after the rains have commenced the untutored eye can discern no trace of the previous existence of a farm.

In West Africa the area of land under cultivation is relatively small. For miles upon miles there is this dense bush, with here and there a clearing for a farm or a small village. Although vegetation is so luxuriant flowers are not often seen.

We steamed into Bo about eight o'clock that night, very much shaken and extremely glad to get out of the train. We arrived in pitch darkness, the train was late, and no such luxuries as lamps exist at this station. After much altercation between my "boy" and the native guard my baggage was produced from the van, and I made my way towards the rest-house, where travellers are accommodated. My recollections of that night are not altogether pleasant ones. After dinner I sat down in one of the madeira chairs belonging to the rest-house, thinking I would enjoy a quiet pipe before turning in. I had no sooner sat down, however, than a curious scrunching noise in my chair made me start and jump up pretty quickly. I had disturbed a scorpion, and only just discovered the fact in time to prevent the horrible brute from biting me. The rest-house had evidently not been inhabited for some

BARRACKS OF THE W.A.F.F. AT DARU

The Sierra Leone Battalion of the West African Frontier Force have comfortable quarters near the rail-head of the Government Railway in the Protectorate. In the foreground can be seen an officer feeding some English fowls.

RIVER MOA AT A SPOT NEAR THE EASTERN FRONTIER OF SIERRA LEONE

This picturesque river has a portion of its course in Sierra Leone and a portion in Liberia. Like most of the Sierra Leone rivers, it is too rapid to be navigable except by canoes, although there is a direct waterway connecting it with the sea.

time, and the scorpion had no doubt made himself a comfortable home in that particular chair, so nearly to my discomfiture. An amusing scene ensued while my servant and two other natives pursued the luckless scorpion with sticks, boots, and anything that came handy, shouting and hurling anathemas at him all the while. After a considerable number of lucky escapes, owing chiefly to want of skill on the part of his pursuers, he was finally laid low by a blow from one of my heavy marching boots, and after this he was soon despatched, allowing me to pass the remainder of the night undisturbed.

The train left at eight o'clock the following morning, so I was up betimes to secure a seat in the very small compartment which was all that was now allotted to travellers. Our train was to take us to Daru, a distance of eighty miles.

I was met at Daru by two officers of the West African Frontier Force, who have their head-quarters here. I was kindly invited to stay at the barracks during my sojourn at Daru, an invitation of which I gladly availed myself.

The barracks are picturesquely situated on the banks of the Moa River. The officers have a very nice mess and comfortable quarters. They have an English-built four-oared boat on the river, where fishing and bathing are also to be had ; in addition there is a tennis-court in the mess-grounds, so that for West Africa they are extremely well provided for.

The Frontier Force Battalion in Sierra Leone is recruited from West African natives, and is a colonial corps, the officers being seconded from their regiments for short periods of duty under the colonial office. The officers are keen soldiers, and the men, under their able instruction, form excellent fighting material. They have done a lot of good service for the Empire in West Africa ever since they were first raised, a good many years ago. I spent that

night at Daru, and next morning despatched my servant and baggage to Pendembu by road. In the afternoon, by the courtesy of the railway officials, I was provided with a trolly, on which I had a ride to the end of the railway, where I found my baggage already installed in the rest-house by the faithful Suri, my servant.

That night was passed in parading my carriers and allotting to each man his particular load. These men were to accompany me as far as the French frontier, where I had arranged to be met by a fresh gang. The next morning, the 9th of January, at daybreak, all was ready for a start. My escort, consisting of a non-commissioned officer and three men, kindly supplied by the officer commanding the Frontier Force, were well accustomed to their work, and had all the loads with their respective carriers ready. It was a curious sight to see these strange figures, each man squatting behind his load waiting for the order to raise it upon his woolly head. Their attire was of the scantiest and raggedest description. One man proudly displayed a threadbare frock-coat, so tattered as scarcely to hang together on him, while another had a red and yellow tam-o'-shanter jauntily placed on the side of his head. These carriers are a very merry, cheerful lot; however long the day's march, however hot the sun may be as they trudge along with a heavy load on their heads, they seldom grumble, but chatter away to each other and crack jokes with their neighbours. Of course, carriers vary a great deal, both in their value as porters and in their disposition. The best carriers in Sierra Leone are the Mendi tribe; these people have been accustomed for centuries to carry heavy loads from the interior down to the big native markets near the coast, and are hard to beat as porters. Our road now lay nearly due north, keeping just on the British side of the Anglo-Liberian frontier.

Very soon after leaving Pendembu we came into the

mountainous region which extends almost uninterruptedly along the border. The bush path here was very rough, and led us for the most part up and down steep hill-sides. This country did not appear to be much populated; occasionally a small village was seen half hidden in the bush. At rare intervals we passed a man carrying a load of palm kernels on his back, probably on his way to the nearest station of the railway, where he would dispose of his burden at a good price to the local trader. These people were Kissis. They have a peculiar way of carrying their loads. A kind of basket is first made of twisted palm leaves, in shape rather semi-cylindrical; this basket is packed with the kernels, and is then slung in the following manner over the back. Two braces are made, one to pass under each armpit and over the corresponding shoulder, while a third brace leads from the top of the basket and passes around the forehead. It is very noticeable that men who carry loads in this fashion are not half so well set-up as the Mendis, who always carry their loads on the top of their heads.

We reached the small village of Mafindo about three o'clock that afternoon, and here I decided to halt for the night. The chief was summoned and told to provide myself and my party with accommodation for that evening. I did not much relish the idea of sleeping here, as it was a very dirty cattle town; the houses looked like pigsties, and were evidently the habitation of cows as well as human beings. However, it was not feasible to push on any further that night as the next village was a long way off, so I had to make the best of Mafindo. The village itself is half in British and half in Liberian territory. The centre street, or alley-way, divides one country from the other. Each portion has its own chief with its own set of laws. A little cotton is grown in this part of Sierra Leone, each village producing sufficient for its own needs. Cotton is

grown in small clearings close to the villages. It is picked by the women, who also clean it and spin it. The process is as follows. The cotton pod is rolled between two smooth stones in order to crush out the cotton seeds; it is then spun on to wooden spindles, and at the same time rubbed with bone dust to harden it. Cloth is usually woven by the men. West African cotton is very short in the staple, so that cloth is made in narrow strips about nine inches wide. To make a garment it is necessary to sew a dozen or more of these strips together. The cloth is coarse but of good quality. In some parts of the country exceedingly pretty-coloured cloths are made; some of these are quite handsome as tablecloths and similar ornaments.

The people themselves have few wants in the way of clothing. The men wear a scanty loin-cloth, and the women have a somewhat larger one, which is thrown round the body, enveloping it from the breasts to the feet. The children of both sexes run about naked until they are thirteen or fourteen years of age. Most of the wealth of the peasants of this region is in their cattle. The animals are small and the cows give little milk; but the cattle are sturdy, hardy little beasts, and seem seldom to suffer from sickness.

At last the chief came to tell me that all was ready for my inspection, with many humble wishes that I should find my abode comfortable. My friend was not a very imposing-looking individual. Although a chief, he was no better clothed than his dirty, scantily dressed fellow-citizens. He appeared to be very old as he hobbled up, leaning heavily on a stick. His chief pleasure in life was to take snuff, and his delight when I gave him a small present of tobacco is not easily described. Tobacco is a most useful article of commerce in these countries. Travellers should be careful to be amply supplied with the fragrant leaf.

It will buy most things in the bush, as natives are fond of it, both for smoking and snuff-taking.

The country here is the northern limit of Mendiland. The Mendis are pagans, and are to a great extent governed by the secret society called "Poro." The chiefs frame the laws of the country with the help of this society, and all land under cultivation is subject to the Poro laws with regard to the gathering of crops. When Poro is put on a crop the owner is not allowed to gather it until the Poro is taken off. For a civilized person it is hard to understand the signification of Poro, or to realize the tremendous influence it has on the Mendi people.

"Medicine" is often placed near the entrance to a farm to scare away evil spirits; this is usually a little rice, or a few bananas, or it may be some egg-shells, which are either laid on the path or placed in an old calabash hung over the entrance supported on two sticks. Forms of "Juju," or "Medicine," are varied and peculiar.

Charms are also common among these people. The Mendis hold two particular charms in great respect. One is called "Suk," and is warranted to bring the lucky possessor good fortune. The other is called "Hoare," and is used to protect the owner from evil influences. It is made of a plant which is fairly common in the hinterland, and which is boiled into a thick greenish substance. This is then eaten, and has the property of increasing the drinking powers of the consumer. This property enhances the prestige of the individual, as the Poro society is much given to drinking.

The usual form of charm in West Africa consists of a few verses of the Koran written on paper and enclosed in a leathern amulet. These amulets are worn round the neck, on the arms, or hung up in the house. They are also frequently found tied to horses' tails and manes. The Mendis, however, not being Mohammedans, do not often indulge in this special kind of charm. The Poro society is

not entirely a good one ; for instance, the Human Leopard Society, of which the object is the murder of persons who are undesirable to the society, is an offshoot of Poro. Boys of twelve to fourteen are circumcised by Poro, and these are the youngest members of the organization. Every village has a portion of bush in the vicinity allotted as the Poro Bush, and kept sacred for the rites of the society. Anyone who penetrates it is killed without mercy. A candidate for initiation must obtain the consent of his relatives, who are required to stand surety that he will not flinch or attempt to withdraw while undergoing the ordeal. He is then confined in the Poro Bush and not allowed to leave it or to speak until the conclusion of his initiation. He is unexpectedly subjected to trials of fire and attacks from wild animals. After this period of probation he is washed, a white cap is placed on his head, and he is given a staff decorated with beads. He is then made to swear a solemn oath never to reveal the secrets of the society ; this oath is usually administered on a tortoiseshell, which is regarded with special veneration by West African natives, for the tortoise is supposed to be a beast of exceptional wisdom. After this he is taken to the lodge of the society, which is ornamented for the occasion with palm leaves and other foliage. He then has marks cut on his back in the shape of triangles, with the apex on the spine and the base on the ribs. Circles are also cut on his breast.

The members of Poro are summoned by a messenger bearing a branch of a tree, on which are tied a number of pieces of stick. The number of these sticks denotes the number of days to elapse before the meeting will be held. Kola nuts are used as symbols of peace and war. Two red kolas signify war, whereas a white nut broken in two indicates peace.

Another curious custom which exists among the Mendis is that many families claim to belong to different species of

animals. Many say they are of the bird family ; these will not eat eggs. Again, others claiming to be descended from crocodiles will not kill these animals.

Another secret society is the Bundu. This has for its object the education of young girls. The teachers are mature women who instruct the students in the duties they will have to perform as wives and mothers. This society is a very old one. Every village has a Bundu Bush in the same way as it has a Poro Bush. Men are not allowed to enter under pain of death. There are many other societies of a more or less religious nature, but these are the most important. Women are regarded as of small consequence by these people. They are made to work in the farm and cook food for the husband while he remains idle. When a man wants a wife he goes to the parents and haggles over the price to be paid. In Sierra Leone a wife costs £3 to £4, but the price varies a good deal. The sum is paid in the presence of witnesses and the woman becomes his wife. Polygamy is the rule among pagans as well as among Mohammedans. The wife has no rights ; the husband can flog her or maltreat her without the woman having any chance of redress. Girls are married at twelve, and in many cases even at nine and ten.

On the 10th of January I left Mafindo, crossing the picturesque Moa River. The inhabitants were now Kissis. The river is crossed in dug-out canoes ; these canoes are simply made from the trunk of a tree which is roughly hewn out in the hollow form of a boat. In the hands of a native these cumbersome and untrustworthy-looking craft are most handy in the West African rivers. The boatman manipulates his canoe with a single paddle, which serves not only to urge it forward, but also to steer it. I must own that I never feel very safe in a dug-out. One has to sit uncommonly still for fear of capsizing, and an immersion in the swift current of the crocodile-infested

streams of this region would be a far from agreeable experience.

The Kissis have three different masters, as a portion of their country lies in Liberia, and yet another portion is under French jurisdiction in Guinea. The Kissis are a warlike tribe, who have given a good deal of trouble to the British Government. They were constantly at war with their neighbours in Sierra Leone, the Mendis and the Konnohs. They also joined King Samory's Sofas in 1891, and raided the protectorate. Their power was finally crushed in 1905 by an expedition carried out by the Sierra Leone Battalion of the West African Frontier Force. A great deal of the Kissy country is under cultivation, for they are good and economical farmers. In their farms are to be seen flourishing crops of rice, maize, and beniseed. Their villages are badly kept, and the houses are very small and dirty.

The following day we crossed the Meli River, which separates Kissy country from the Konnoh tribe. Transport across this river is done by a still more hazardous method than on the Moa River—on rafts. These rafts are made of roughly-hewn logs, lashed together with " Tie-tie." " Tie-tie " consists of supple creepers, growing in profusion in the bush, which are most useful in a country where no rope is available. One's baggage is first deposited on the raft, forming a dry and fairly steady platform. After this the passenger climbs warily on to the top of his worldly possessions, seating himself cautiously so as not to upset the somewhat delicate equilibrium of the craft. The raft is worked by a native with a long pole, who directs its unsteady course from the stern end. If you have any holes or weak spots in your boxes this method of transport will unfailingly find them out. Water rushes through the wide gaps between the logs of the raft, and miniature waves frequently wash over the platform.

Konnoh country is decidedly mountainous. It is intersected by broken ranges of hills, rising to a height of nearly 3000 feet above the sea. The valleys between these ranges are covered with grass-land, the haunts of "bushcow," as the small West African buffalo is termed. The Konnohs are an offshoot of the great tribe of Mandingoes, which inhabits a vast stretch of land from the Middle Niger to the Gambia. Their country was devastated by the Sofas about 1890, consequently a large number of the people were exterminated or taken into slavery. Peace now reigns, however, and the people are regaining confidence and the population is increasing. Mohammedanism is making rapid progress among them, although a large number are still pagans. Missionaries are scarce in these parts; during my travels I do not recollect seeing a single Christian among these people.

In the village where I stayed that night I saw what is an unusual sight in Sierra Leone, a horse, or, to be strictly accurate, a small and weedy-looking pony. The proud owner was the chief, whose dignity and authority were considerably augmented by the possession of this quadruped. The disease called "Trypnasomiasis," conveyed by the tsetse fly, is very prevalent in the protectorate, and is fatal to horses and cattle. It is, however, extremely local, certain districts being quite free from its ravages. This probably accounts for the fact that cattle can often live where horses cannot, for cattle never wander very far, thus possibly not getting into the infected area, whereas horses naturally cover greater distances and would be more likely to pass through a tsetse fly zone.

CHAPTER III

Shooting in the grass-country—An unfortunate mishap—Doubtful pleasures of a journey—Sources of the Niger—A curious frontier rock—Bush fires—Bird-life.

IN the northern Konnoh country some good bushcow shooting is obtainable. In the grass-lands before mentioned these animals are wont to feed at night and during the early hours of the morning, and this is the best time to come up with them. When the sun gets hot they retire into the bush, where they remain till late in the afternoon. They are generally to be found near water, and appear to drink in the evening and early morning. I spent a couple of days after these fine beasts, but did not have as good sport as I should have had a month or two later, when the grass is burnt. Bushcow shooting is certainly one of the most exciting forms of sport with big game. This animal is probably one of the most dangerous to tackle. A wounded bushcow almost invariably charges, and is extremely vicious. In cover, such as long grass or bush, he is exceedingly dangerous. Indeed, it is very foolish to follow a wounded animal into such places. He will lurk under cover, with his head turned in the direction from which he expects his enemy, and charge when within ten yards or so. Many serious accidents have occurred to sportsmen of late years in this manner. Finding the grass still so high I did not linger long in this district, but pushed on for the Tembikunda Range and the sources of the Niger.

The following day I had an unfortunate mishap. It was early in the morning and I had stopped to have a little

sport with some pigeon in a farm. My small caravan, with the exception of one carrier, had gone on. I was turning sharply to shoot a bird flying off to my right when I struck my leg against a stump of a tree. A sharp piece of wood about three inches long penetrated just under the knee-cap, causing me to fall down in agony. The stick was firmly wedged in the flesh so that the united efforts of my carrier and myself were unavailing to extract it. I accordingly despatched him at once to stop my caravan and summon my servant with my small medicine-case. After cutting the flesh I was able to withdraw the piece of wood, but my leg was now so swollen and painful that I found it impossible to walk. The sergeant of my escort and my "boy" managed to rig up a hammock by utilizing one of my blankets and a bamboo, and in this I was slung, feeling more like a sack of goods than a human being, and thus transported for the remainder of that day's march. The next few days were anything but a pleasant experience. I developed bad blood-poisoning in the knee and was confined to my hammock. The road was extremely rough, sometimes leading up the side of a mountain, which was so steep as to appear like a veritable precipice. When going up these inclines, in my uncomfortable conveyance, my leg got jolted unmercifully and I suffered excruciating pain. I think the worst day was on the 15th of January.

Between the villages of Kondundu and Kundema there is a stretch of bush for about eight miles, which contains some of the thickest, most impenetrable cane-brake it has ever been my lot to encounter. The path I was following was evidently little frequented, and was some miles east of the usual trade route from the north to the south of the protectorate. Our road lay along a swampy valley, much overgrown with this stiff, unyielding reed. The native matchet, which is universally used for cutting bush, was quite useless against this stubborn fibrous stuff, and

the only alternative was to force our way through it. Progress was very slow. The carriers in front of me with loads on their heads had the greatest difficulty in making a path for themselves, whereas my hammock-men had a far harder task in getting the unwieldy hammock through without upsetting me in the bush. I had to be carried by two men whilst the other two bearers hurled their weight against the reeds and made a path for us to follow.

On the 16th I arrived at a small village in the Tembikunda Range, about three miles from the spot where the Niger rises. Here I had a great disappointment; I was informed there was no path leading to the river source, and that the track lay over exceedingly rough, precipitous mountains. This information proved to be only too correct. I was quite unable to walk ; and to carry a hammock up those rugged precipices was quite impossible. I therefore had reluctantly to give up any idea of seeing the actual source of the great Niger River. The river is said to rise in a big rock, which is also the source of four other rivers. These are the Feliko, which flows into the Niger in French Guinea, the Bagwe, and two smaller rivers. The Bagwe is one of the biggest rivers in Sierra Leone. The Niger here is known by the name of Tembiko, or Joliba. In the Susu language, much spoken on the upper reaches of the stream, the word Joliba means " He who can run faster than any other man." There is a curious legend attached to the source of the Niger. The natives have a superstition that a devil lurks inside the rock where it rises. It is said that any man who is intrepid enough to approach the rock and gaze on it will be killed by this demon. In consequence of this sinister reputation it is the habit of the local savage to shun the neighbourhood of the source. By judicious bribery he can be induced to show a stranger the spot, but his manner of so doing is peculiar. He will, on nearing the rock, turn round and

walk backwards towards it, at the same time covering his eyes with one hand, so as not to see the haunted place, while with the other hand he indicates the point where the river rises.

This rock forms one of the boundary marks on the Anglo-French frontier, separating Sierra Leone from French Guinea. The stone has inscribed on it, upon the western side, the fact that that portion is inside the British border, and the names of the members of the Boundary Delimitation Commission are here written. On the eastern side it is stated that that portion is in French territory, and the names of the Boundary Commission are also here similarly inscribed.

The Niger rises at a height of under 4000 feet, in a very wild, uninhabited country. The Tembikunda Range is exceedingly rocky and precipitous. It consists of a rugged, broken mass of peaks; in many cases hills are separated from each other by steep, narrow valleys or gullies.

The sides of these mountains are covered with thick, grassy bush. This grass grows to a height of twelve feet and more in the rainy season. When ascending a peak it is impossible to see the summit, not because it is so high, but merely because the vision is obstructed by this tall grass. Bush fires were just commencing when I passed through the country. It was a beautiful sight at night to see the huge flames working their way up the steep mountain-sides, just like fiery serpents as they coiled and twisted themselves around some piece of bush a little greener than the rest and able to resist them for a short moment. These fires are started by natives in order to clear the ground, by burning down the bush, so that they can plant their crops. When the Harmatan wind and the sun have dried the vegetation it burns with ease. A fire thus started rapidly spreads over many miles of country.

It certainly does a considerable amount of harm by killing a number of beautiful trees every year; where trees are numerous and many are thus burnt to the ground, the tendency is naturally to decrease the rainfall of that district. On the other hand, it is argued that burning the bush fertilizes the soil through the medium of the ashes of the leaves and burnt vegetation. In any case it is a very old custom among West African natives and one which would be extremely hard to repress. The negro is naturally a lazy man, consequently this mode of clearing the bush peculiarly appeals to him since it demands so little effort on his part.

Bird-life is not so abundant as might be expected in Sierra Leone. The large expanses of almost virgin bush one would almost imagine to teem with wild birds, but this is far from being the case. In the forest-country the hornbill is very common. These birds are generally seen in large flocks, and assimilate well with the solitude of their surroundings as they hover from one tree to another with their peculiar flight, uttering their weird, mournful cry. Their flight reminds one forcibly of a switchback working very slowly, as they flutter first up and then downwards, in the motion towards their goal. Hornbills often build their nests in the trunks or branches of trees. When searching for their nests it is a common sight to see the young birds peeping out of a snug nest almost hidden inside the hollow of an old branch.

The violet plantain-eater is a beautiful bird, which is also common in forest-land. It has a gorgeous colouring. The body is violet and green, while the wings are a brilliant crimson. This handsome bird has a peculiar raucous note. It is a curious fact that singing-birds are exceedingly uncommon in West Africa. I never recollect hearing any bird with a voice to be compared to our nightingale or black-cap.

In the region of the palm tree the golden oriole is frequently met with. This little bird builds its nest suspended from the branches and leaves of the tree; on a single tree as many as twenty or thirty may be counted. They strip the tree of all its foliage and in time kill it.

Among game birds the most widely distributed is one of the francolin partridges, commonly known on the coast as the "bushfowl." It is found anywhere in the vicinity of a farm, and particularly delights to feed on cassada. This bird feeds in the early morning and again late in the afternoon, but during the heat of the day it takes refuge from the sun in the thick bush. It has a curious, hoarse note, by which the cock is often heard calling to his mate in the early morning. The best time for shooting these birds is after the grass is burnt, from March to June. Besides, the young are full-grown by then. They appear to breed in the late autumn, and birds hatch out in November and December. Guinea-fowl are found in many parts of the protectorate. Coveys of twenty and thirty are by no means unusual. Their favourite haunts are the rice-fields, in which they feed in the morning and evening. They prefer a feeding-ground which has thick cover on at least one side; in this they rest during the heat of the day and at night.

Guinea-fowl, like bush fowl, are often seen roosting in trees. Indeed, with the former, it is more usual to find them sitting in trees than on the ground. A guinea-fowl is perhaps the most wary of West African game birds. He has very keen eyesight and hearing. He will generally have discovered your presence long before you are aware of his, and in that case he takes alarm and is off immediately. Guinea-fowl run far more frequently than they fly. Once they have taken to their heels they are extremely difficult to overtake; the only plan is to cast dignity to the winds and run at your best pace after them.

Even then your chance of getting a shot is very remote, and perhaps the wisest course is to leave them alone. Guinea-fowl in the bush-country are excellent eating, but I have noticed that these birds when shot in a sandy region are generally very tough. This is probably due to the different nature of food they live on. In open country, unless the sportsman is very keen, it is usually a safer plan to take a long shot with a rifle, rather than attempt to stalk these very cunning birds with a shot-gun. In the grass-country on the eastern frontier of Sierra Leone I came across one or two button-quail. But I think these birds are uncommon, and I never saw more than one at a time.

A bird locally called the grey pigeon, but in reality a large ringdove, is very common. It feeds on maize, millet and rice, and is seen in large numbers when the crops are ripe. In some parts of the country a native is on duty all day in a farm when the crops are getting ripe, his business being to scare away the birds. This individual takes up his position on a raised platform, built of rough bush-sticks, and placed at a suitable spot in the farm. He is provided with a whip of some supple bush-creeper, which he cracks with considerable noise and effect, thereby driving away any bird which contemplates an attack on the crops.

The green pigeon, or at any rate one variety of it, is found in certain localities. It is partial to water and high trees. Frequently seen on the creeks near the sea-coast, it is also found up-country in the forest belt. This bird is very swift of flight, generally flying at a considerable height; it affords some sporting shots. The colouring is a beautiful combination of green, canary-yellow and French grey. The beak is crimson, while the legs are yellow. It alway appears to be in excellent condition, and is a dainty morsel for the sportsman's table.

In the grass-country the lesser bustard is occasionally

found. The bird is sometimes seen in pairs, but more frequently single. Its flight is slow, making it easy to shoot. The wings of the male are a rich black and white, and the breast is mottled grey and tan. A strange bird which frequents the open, rocky bush-country, is the standard-winged night-jar. It has a peculiar habit of crouching flat on the ground, with which its nondescript khaki colour well assimilates. I have often been startled of an evening by the sudden, silent way in which this creature has risen up from my feet. During the mating season the male bird has two curious black appendages to its tail, which add considerably to its strange appearance, and are evidently meant to attract the female bird he is courting.

The cow-bird is found in all localities where there is much cattle or game; it serves the useful purpose of consuming the ticks and lice on the bodies of these animals. It is black, and much resembles a starling in size and colouring. Its beak is sharp, enabling it to pick out these insects from their hiding-places. The sight of one of these little birds, perched on the back of a cow or climbing up its flanks, is distinctly comical.

The widow-weaver is so common that I had nearly omitted to mention it. This is a very small black and white bird, with a tail consisting of two streamers, about twice as long as itself, whose habit is to flutter about from one wisp of grass to another, in a curious, laboured fashion, just as if its unwieldy-looking tail were too heavy for its small body, and threatened every minute to weigh it down to the ground. These tails, like that of the night-jar, previously described, grow to their full length in the mating season.

CHAPTER IV

The Harmatan—Native burial rites—Koranko superstitions—The Anglo-French frontier—Solitude of a Customs post—A change of scenery—Smuggling—A change of carriers—Intoxicating liquor—The Upper Niger—A splendid spectacle—A good highway—Native music.

IN the Tembikunda Mountains I found the variations of temperature between night and day extremely trying. The maximum by day never exceeded ninety degrees, but at night the temperature used sometimes to fall to under fifty degrees. The greatest height I reached was 2480 feet. The fall of temperature was evidently caused by the dry Harmatan wind which always blows at this time of year. This wind is said to come from the Sahara ; it blows from the north-east for more or less long periods during the months of December, January, February, and March, all over the West Coast of Africa. The theory that it comes from the Sahara appears to be supported by the fact that it contains a quantity of fine particles of sand. Its extreme dryness is particularly noticeable in the otherwise damp coast atmosphere. Books and papers curl up, and the skin gets uncomfortably parched at this season. Natives are especially susceptible to chills and pneumonia while the Harmatan is blowing.

In spite of sleeping in a native hut, a place not usually remarkable for its coolness, I used to shiver under my three blankets. Finally, the only way I could keep sufficiently warm to get to sleep was by lighting a huge log fire close to my bedside before retiring to rest. Of course, the cold was not really so intense, as the thermometer was several

degrees above freezing ; but the sudden fall in temperature between night and day had the unpleasant effect of making it appear like midwinter in England.

A curious fact about the Harmatan is that, owing to the sand carried by it in suspension in the air, a kind of haze is produced which considerably restricts one's range of vision. The effect is very similar to that caused by a London fog. Indeed, when watching the sunset while a strong Harmatan was blowing, I could easily imagine myself gazing at that peculiar appearance seen in the sky on a foggy winter's afternoon in Town. At times this curious wind blows with great violence. This is particularly the case in the early morning, when even on the march a thick overcoat can be worn without feeling in the least degree too hot.

The country in which I now was is inhabited by the Korankos. Their territory is a large one, extending for a considerable distance north and west of the Niger watershed, while a small portion of the tribe overflows eastward into French Guinea. The whole country is very mountainous, and the people are extremely poor. Most of them are pagans. These Korankos suffered considerably during the wars of Samory, when many of them were exterminated by his Sofas. The principal town is Kruto, lying about forty miles due west of the Niger source, and a trading centre of some importance. At the small village of Manson I arrived on the day of the burial of a chief's son. The ceremony which takes place on such an occasion is somewhat remarkable, and it was my good fortune to witness it here.

The whole burial rites take three or four days, the body not being taken to the grave till the last day, by which time, as can be imagined, it is in an unsavoury state of decomposition, and not fit to be approached by a white man.

Immediately a death occurs the womenfolk start lamenting ; in the meantime messengers are despatched to all

the slaves and relatives in the other villages. As this takes some days, the body is kept in the house till they have all arrived. In the case of a Poro man, his body is deposited in the "Poro" Bush. No woman is permitted to look on the corpse. Dancing, singing, and tomtoming are vigorously kept up the whole time. The women take a leading part in this portion of the ceremony. A woman's body is taken to the "Bundu" Bush until the day of burial.

On the burial day all the mourners plaster themselves with white clay and follow the corpse to the burial-ground. Country cloths are buried with the deceased, the number varying directly with his personal wealth. The favourite hour for the interment is sunset. After the burial guns are fired by anyone possessing a fire-arm, with the intention of frightening away all evil spirits; at the same time a sacrifice is made on the grave of a fowl, a sheep, or a cow, according to the wealth of the dead man. These sacrifices are also offered for the purpose of propitiating the dead man's ancestors, who, tradition says, are otherwise in the habit of torturing his soul.

Directly after the burial the deceased's property is taken possession of by the heir, who then invites his friends to a feast, on the principle, I suppose, of "Le roi est mort, vive le roi." At a burial or a marriage the one aim of the native seems to be to spend as much money as possible.

Some Korankos are members of the mystical Kofung society. The Kofung society has a large organization among the Limba people, who inhabit the north centre of the protectorate; but it has also some influence over the western tribes. Its rites are of a mournful, morbid character. A candidate has to simulate death, and is supposed to be made to return to life by the officiating members at the initiation ceremony. As he lies on a litter, apparently dead, the members dance round him, raise him up, and

wash his eyes with a lotion prepared from the bark of a cork tree. When the dance is ended the candidate stands over a fire, the chief of the sect then holding a burnt stick before his eyes, and making him swear the sacred oath of the society. There are several masonic signs by which a Kofung man may be recognized. He frequently has a brass ring on his toe, thumb, or wrist. One man may be recognized by a brother in the order if he crosses his arms, or crosses two twigs. Every member is supposed to have an attendant spirit who can be summoned, if required, by uttering certain magical words and calling the spirit by name seven times. Kofung men believe they can transform themselves into animals. If, however, they are tied up to a piece of corkwood, they believe they no longer possess this power.

As far as can be ascertained, the Kofung society is not dangerous to the community. Murder does not appear to come within its scope. It seems merely to teach a highly superstitious doctrine, such as the mystery-loving pagan's soul delights in. Even when these people adopt Islam, they never seem wholly to give up the mystic rites of their former pagan teachings. They certainly never lose the superstitions of their particular tribe. In cases where pagans have been converted to Christianity exactly the same failings are almost invariably to be noticed.

Amongst many of these pagan tribes a curious superstition exists with regard to the birth of twins in a family. The twins are killed and the mother driven out into the bush, for twins are said to be a curse from the god the people worship; it being supposed that if the foregoing brutal procedure be not carried out the whole family will become mad.

On the 17th of January I set out to cross the border into French Guinea. Our road lay along small mountain-paths, more like goat tracks than roads, which wound laboriously

up the precipitous, rocky slopes. The scenery here is very wild and beautiful. As far as the eye can reach there rise up a series of rugged peaks, clothed in light bush and tall elephant-grass. Numerous mountain torrents rush down in their headlong course to the plains of Sankaran, which can but faintly be discerned many miles below in French Guinea.

Some of these tiny streams are destined to grow into important if not mighty rivers; such a one is the Niger. To see this insignificant rivulet, here only a few feet wide, as it dashes down the eastern slopes of the Tembikunda Range, who would dream that it is to develop into a wide, splendid waterway, destined to fertilize large tracts of country in Western Soudan, and to carry innumerable craft on its broad bosom before it finally throws its waters into the sea 2400 miles away ?

My hammock " boys " had a rough time carrying me over these mountains. We climbed up to a height of 3000 feet, according to my aneroid barometer, before commencing the descent to the plains below. Once or twice, I must own, I felt as if my last hour had come, when, having arrived at an unusually difficult place, my satellites had to raise the hammock to the full extent of their long black arms in order to clear some huge boulder blocking the path. At these moments I used to gaze down at the yawning precipice at my side, knowing that if one of those arms should waver, be it ever so slightly, I should in all probability be hurled down some 2000 feet into the chasm below. Fortunately for me my bearers were brawny fellows, and we arrived at the frontier village of Farakoro without any mishap.

The good people of this little place were evidently not used to visits from white men, and were much astonished at my sudden appearance. The trade road between French Guinea and the east of Sierra Leone is a considerable

distance north of this place, and goes to the important station of Kaballa, which is the head-quarters of one of the Sierra Leone District Commissioners. On my arrival at Farakoro the inhabitants fled precipitately, and I found myself left in undisputed possession of the village. I at once sent my servant with reassuring messages to the chief, who had taken refuge in the neighbouring bush with his followers. My escort was no longer with me, for I had sent the soldiers back to Daru that morning. After some palaver the old chief was induced to show himself, and finally led his people back to the market-place, although it was palpable that his suspicions of us were not quite set at rest.

I halted an hour here to give the carriers a little well-earned repose, and, while they were resting, I thought I would try the effect of a present of tobacco on my old friend the chief. It was magical. No sooner had he got possession of this highly prized article than his face became wreathed in smiles, all suspicions either vanished or were forgotten, and we were on the best of terms. The old man produced some bananas for myself and some rice for my carriers, so that everyone was in the highest of spirits. Food has a most remarkable effect on the negro. If his stomach is well cared for he is a cheerful rascal, and will follow you almost anywhere. Whether he wants it or not he is always ready to eat; indeed, the amount consumed by a black man at one meal is something prodigious. I recollect seeing one of these men devour his ration, one and a half pounds of rice, which, when boiled, swells to a considerable volume, and is itself more than a meal for two very hungry Europeans. After this he bolted two large yams, which are also a very satisfying form of diet, and finally he ended the meal with a leg of goat! Strange to relate, after a few hours' peaceful slumber he appeared to be none the worse for his huge repast.

The road now improved considerably, and two miles farther we finally left the mountains, emerging into the broad Sankaran plains. The change in scenery was really remarkable. Broad rice- and maize-fields stretched on every side ; in place of the wild, rugged hills we were in a smiling land of peace and plenty. Habitations were numerous, peasants were everywhere at work in the well-cared-for farms, and one was at once struck by the general air of prosperity. We soon came to a comparatively wide road, which we followed to Sarafinian. The country was now decidedly open. Bush there was, as there always is in West Africa, but it was all of the nature of very low scrub and grass-land.

On my arrival at Sarafinian I was greeted by a French official, who proved to be the Customs officer. At certain places along the frontier of French Guinea there are Customs Stations established in order to prevent smuggling of dutiable articles across the border. In charge of these posts there are one or more Europeans. They are provided with a small staff of native policemen who assist them to carry out their duties. My friend had to supervise a section of over sixty miles of frontier. The work is arduous and not unattended by danger. Would-be smugglers naturally choose the night for their dashes across the border, so a considerable portion of the work has to be done after sunset. Even the best-behaved smugglers are not men to hold human life of much account, so that the task of capturing them is attended with a good deal of risk. The existence must be a very lonely one. Situated as he was in a desolate spot, thirty or forty miles from the nearest white man for twelve months or more, and leading a life of some danger, it requires a man endowed with particularly high spirits not to get depressed at times. This French official was blessed with a large share of his country's native vivacity. He had been fourteen months

by himself at this little station, and during this long period had only seen one white man ; yet his good spirits never seemed to have failed him. He welcomed me most warmly, and was kindness itself during my short stay at Sarafinian.

I was glad of an opportunity of resting my leg here. The knee was much swollen, being so painful I could not bear to put my foot to the ground. For the first time I had a chance to get it well dressed, and by the 19th it was so much better that I decided to push on upon my journey northwards.

Here I paid off my Sierra Leone carriers, whose shining black faces beamed with delight at receiving so much wealth all at once. I think, too, that they were rather pleased to get back to their native land. These people are generally eager for a job in their own country, or even, perhaps, anywhere in the protectorate ; but as soon as they get into a foreign region, where food is different, and the laws and customs are not the same, they begin to "fear," which, being translated into plain English, means that they are nervous of what may happen to them.

My new gang of carriers were local natives. They were not in the least anxious to be engaged, but the promise of high pay and the glowing pictures painted by the Customs interpreter of the way they could enjoy life on the proceeds thereof when they returned, were effective in producing a sufficient number of stalwart porters for my needs. The carrier in Sierra Leone is paid ninepence, but the French Guinea carrier seldom gets more than sixpence per diem. My offer of ninepence, therefore, was to these men a munificent one, and the tempting bait of so much wealth was more than they could resist. The chief of the town was present while the bargain was being made, as it is the custom for all such dealings to be done through the medium of the chief concerned. He was highly interested in the question of the amount to be paid each man. In fact, so eager was he

that I am afraid he had in his mind some material gain for himself rather than the welfare of his people. This chief was a strange, uncouth individual.

His hair was very long and matted; he also wore his beard long, but this was twisted in a miserable thin plait, hanging down below his chest. He looked so dirty that it would have been necessary to scrape him with a spade for some time before he could possibly be washed; finally, he had an inordinate craving for absinthe, or any kind of alcohol, and, according to my French acquaintance, he was usually the worse for liquor. How he managed, in this remote little place, to get so much European liquor was an amazing problem to everyone. Few traders came that way; besides, absinthe and such-like dainties are expensive luxuries in French Guinea, where import duty is exceedingly high, and our worthy friend was a poor man. This was apparently a secret known only to himself, and one he would never disclose even when he was in his most confidential moods. So the problem is, and appears likely to remain, unsolved. Of course, there is also a great deal of native alcohol drunk by the negro in West Africa. In all the districts within some 200 miles of the coast there is a broad belt of palm trees. These trees produce a wine which, if allowed to ferment, is highly intoxicating. The wine is obtained in the following manner. An incision is made near the top of the tree, close to where the leaves sprout; a calabash is then hung in such a position as to catch the liquid as it flows out. At convenient times the owner comes to remove the contents, which are a very cool and refreshing beverage when not fermented.

The mode of climbing a palm tree is peculiar; it reminds one of the proverbial monkey on a stick to see the native as he ascends a tree. Ladders are not used for this purpose, but a loop is made with a supple creeper and placed round

the trunk of the tree. The climber then seats himself in the free end of the loop, placing his toes against the bark of the palm. By digging his toes firmly into the tree-trunk he is able to relieve the loop of his weight sufficiently to permit of the loop being pushed further up the tree. In this manner the top is gradually reached. Natives generally climb their trees to fetch the wine in the early morning; the liquor is then left to ferment in the sun till the evening. About sundown the men assemble in a hut and drink the intoxicating stuff while squatting by the fireside. Women as a rule do not drink; at any rate, I never remember seeing a woman under the influence of palm-wine in the bush.

Soon after leaving Sarafinian I crossed the Niger. It was here about ten yards wide, and not more than three feet deep. The stream at this stage is, of course, of no importance, but is of interest purely on account of the greatness which is to be its portion later. Between this spot and Faranah the stream is crossed three times, gradually widening out as it has room to expand in the comparatively flat Sankaran plains, till at Faranah it is about seventy yards broad. It is fordable all the way, and until this town is reached no canoes are seen on its waters. The banks are lightly wooded, sloping easily down to the water's edge. As the little river meanders peacefully through the bush-country, it might well be a trout stream in some quiet spot in England.

That day's march was a long one, for I only reached camp at six o'clock. The carriers were all behind my hammock, and some did not get in till long after dark. About eight o'clock the headman arrived with the pleasant news that two of the porters had thrown the loads on the ground and bolted several miles back. As might have been expected, these two loads were just the most important ones of my caravan, one of which was my camp bed. I immediately

ordered two men to be despatched to retrieve them, inwardly praying that they had not already been stolen by some rapacious negro on the road. This habit of throwing down one's belongings and running away when they feel so disposed is a common one among West African carriers, and is particularly annoying to their unlucky employer. However, in that land one soon gets philosophical about such trifles, and comes to the conclusion that life is too short to permit of them being taken too much to heart. So, making the best of affairs, I lay down on a blanket and soon was fast asleep.

The next morning, having enrolled two fresh men from the village where I had slept, we were once more up to marching strength. The sun was now getting decidedly hot; the country was undulating bush, but fairly open. We had not gone many miles when dense clouds of smoke and huge flames became visible on the horizon. It was evident we were marching towards a bush fire. The heat grew more and more intolerable as the wind drove the flames in our direction, and the porters instinctively began to run forward in order to dash through the burning zone as quickly as possible. It was the first time I had actually marched through a large bush fire, although I had, of course, often been close to a patch of burning bush-country.

In spite of the terrific heat, the spectacle was so splendid as to make one oblivious of the discomfort. For miles in front of us was a huge wall of leaping, hissing flames. Through the centre there ran a narrow path from which the blazing fire seemed to have been hurled back to the right and left, thus giving us a free passage through the scorching bank of flames. The fire was approaching with amazing rapidity. In front of it darted out many terrified inhabitants of the bush, such as hares, field-mice, and partridges, all wondering, no doubt, what was this infernal, blazing

demon which thus relentlessly drove them from their homes. While the ground was covered with these poor frightened creatures, the air was full of equally terrified insects, attempting to get out of danger before their wings should be singed by those cruel flames. In many cases their attempted flight only drove them into the clutches of their arch-enemies the hawks, who, seemingly oblivious of the heat, circled in the air above their luckless victims, every now and then pouncing down on a tempting morsel.

Once we started running it did not take long to get to the other side of the fire, for it sweeps forward with extraordinary speed, burning up the grass and small bushes in a few seconds, leaving in its wake only charred remains and here and there a tree or bush, more tenacious of life than the others, still wrapped in a sheet of flame while the fire is disappearing in the distance. Big trees are often to be seen still blazing some days after the bush fire has passed that way. After emerging from the flames we were all begrimed with the soot and ashes; even the natives' dusky faces showed signs of having been through something blacker than the colour of their skins.

The change which had now come over the surface of the landscape was remarkable. In place of the waving bush, which had existed but a few minutes before, there was now an open plain, almost devoid of vegetation, carpeted with smouldering ashes. Under the heat of that tropical sun one missed the grateful shade afforded by the bush, and the perspiration rolled in big drops from the faces of the carriers as they trudged stolidly on under the weight of their loads.

On the 21st of January our bush path merged into the main road which runs from Faranah to Kissidougou. This is a highway, fifteen feet wide, and kept in good repair by the French. It was far superior to any road I had yet come across, and made a very decided difference to our

rate of marching. There is one great drawback to these wide roads in West Africa, viz. they are much hotter to march on, as there is no shade available. But that is, after all, a minor disadvantage, as the communications of a country are obviously greatly facilitated. Here I saw the telegraph line for the first time since leaving the Sierra Leone Railway. To a visitor in French West Africa it soon becomes apparent that our continental neighbours excel in the matter of public works in their colonies. Roads, railways, bridges and telegraphs have the most careful attention, and a vast amount of money is spent on their construction.

That night I camped at the village of Kamaraia. The inhabitants are an offshoot of the Korankos of Sierra Leone, and are similar to them in their habits; but as the country is more fertile they are more prosperous. The evening was beguiled by some native music. The musician played an instrument called "Ballaini." It produces a melodious and rather liquid sound, and was one of the most musical native instruments I heard. It is made of a gourd, partially covered over with goatskin, and has narrow cross-pieces of bamboo nailed over it. The musician produces the different notes by hitting these cross-pieces with a small stick. Most natives have a good ear for music, but their repertoire of melodies is extremely small. A man will be quite happy, however, in sitting the whole evening repeating the same bars over and over again to an admiring audience. I regret to say that I was not so easily amused, and after half an hour had to tell our friend to finish his performance elsewhere.

CHAPTER V

Faranah—The Malinkés—Castes—Big game on the Mafou River—Native methods of hunting—Trapping—Ground nuts—The native trader—Kouroussa—Native types—French gardens—Native dances—Bee-hives—Fruit.

BY the 22nd of January, the date of our arrival at Faranah, I had so far recovered as to be able to walk a few miles each day. My usual plan was to walk in the early morning until the sun got oppressive, when I retired to the hammock until about eleven. About this hour I used to halt in a shady spot, by a stream, and have my breakfast while the carriers cooked their food and rested. A halt till two or three o'clock gave my "boy" time to prepare my meal and to have his own food and a rest before we again set out. On one of these occasions, just after I had halted, I noticed the unusual spectacle of two Europeans in hammocks with a number of carriers coming towards me. One of the two proved to be a lady, while the other was her husband. They stopped, and we had a few minutes' conversation. They were on their way to Kissidougou, a large French post in the south of Guinea. He was the director of the telegraphs, and they had but lately arrived from France. The lady had the characteristic vivacity and charm of her countrywomen; she was nursing a young bushfowl which they had picked up on the road, and which had hurt its leg. The poor little bird's bright eyes wore a terrified look, but this soon began to disappear under the gentle treatment of its kind mistress. The lady had never been out of her native land

previously, and was much interested in the strange sights of West African bush life.

Faranah is the first place of any size and importance on the Niger. It consists of a native population of about 2000, and a dozen Frenchmen. The native town lies in a hollow, close to the banks of the river, while the Residency and European quarter are on a hill above. Faranah does a small trade in rubber and cattle, most of which are sent down to the coast port of Konakry. There is a caravanserai, or rest-house, in the town. This useful construction is found in nearly every village of any size in French Guinea, and is a great boon to the traveller. The headman of the place is charged with the duty of keeping it clean, and as it is constantly inspected by a French official, the house is usually in the best of order. The houses at Faranah are built of mud, with walls about two feet thick, and thatched roofs. They are very cool in the hot weather, but are rather cold and draughty in the rainy season, when it is a good plan to light a fire in the middle of your room.

At Faranah I stayed with the French District Commissioner, who was a most hospitable and courteous host. Here I was delighted to be able to discard my hammock, as my knee was nearly healed. A two days' halt was necessary to collect fresh carriers, and to get information of the shooting prospects in front of me.

My intention had been to march as rapidly as possible to Kouroussa, and strike eastward from that place into the Wasulu country, which lies between the Niger and the Ivory Coast. At Faranah, however, I was informed that there was some excellent shooting to be had on the Mafou River, a tributary of the Niger, which is crossed on the road to Kouroussa. I therefore determined to halt at this stream on my way, and sample the big-game shooting in the vicinity.

On the 24th, bidding good-bye to my kind hosts, I set

out. The road follows within a few miles of the Niger, which here takes a north-easterly course. The country is rather thick bush, but is well populated. Villages occur every three or four miles most of the way. The people who inhabit this part of French Guinea are Malinkés, and they are dark of complexion and stoutly built. They are a higher type than the coast negro, having probably intermarried with the Fulanis, to whom they no doubt owe their more regular features and thinner lips. They are chiefly an agricultural people, but are not fond of work in any form. The majority of them are Mussulmans.

The king of the tribe is called the "Alimamy." He has a large court, chiefly composed of his relations, who all expect to profit, either directly or indirectly, by their position. They are the channel of communication between him and his people. His council is composed of the headmen of the villages, and rich native traders. The council decides all matters of dispute with other tribes. The decision for making peace or war rests with them, and, in the event of the king's death it is this body who elects the new Alimamy.

Villages are organized on the same lines, each village having a chief, assisted by his council of influential villagers. The tribe is divided into two portions, those who are free, and those who are captives.

The free portion of each tribe is again divided into five castes :

(1) The Horos, who are citizens.
(2) The Sohrés, weavers.
(3) The Garangis, or shoemakers.
(4) The Hrabis, or blacksmiths.
(5) The Yellimanis, or jesters.

The Horos are the only class from which chiefs and headmen can be selected. They are the predominant caste, and all the others are their menials.

Horos can only marry in their own class. The other people can marry amongst themselves as they please.

The Hrabis are looked on with great contempt, corresponding in caste to the sweeper class of India. It is uncertain what was the origin of this, but there is a story connected with Mohammed and a blacksmith which probably accounts for it. It is said that the Prophet was once pursued by some infidels, and concealed himself in the trunk of a tree near the spot where a blacksmith was at work. The latter was on the point of betraying Mohammed's hiding-place when he was struck blind by God. Mohammed, when he issued from the tree, is supposed to have cursed the blacksmith and all his kind.

The Yellimanis are a very obnoxious class. They spend their time in abusing those who do not give them any money, while they sing the praises of their patrons. Every chief has an entourage of these jesters. They are often equipped with musical instruments, and form a sort of band which precedes him wherever he goes.

Families have always some animal which is their particular aversion, or evil spirit. It may be a lion, or leopard, or crocodile, or some such beast. For example, it is supposed that if a man's evil genius was a crocodile, and he should eat some of this animal's flesh, it would give him some terrible skin disease, such as leprosy.

The captives, or slaves, are of course not now officially recognized by the French. Any man who is a slave can at once obtain his freedom by applying to the nearest Commissioner. It shows how contented these captives usually are with their lot, when it is noticed that they very rarely ask to be made free. They are well treated, are not hard worked, and get free board and lodging. These slaves were taken from various tribes during the intertribal warfare which raged in this part of West Africa for many years. In most cases these people have quite forgotten

the country of their origin, and are perfectly content to remain with their masters. A slave, when he has gained his freedom, can be permitted to join any of the above-mentioned castes, or may marry into any of them. His position is therefore superior to that of a Hrabi. The captive lives with the members of the family, and is in every way treated as one of them.

On the 26th of January I arrived at the Mafou River, where I had great hopes of getting some elephant. These animals were reported by the natives to come down here at this time of year. On the river there was a certain palm of which they were very fond. Native information is, of course, frequently the only kind available, but it is also far from reliable. The negro, when interrogated, will give the answer that comes easiest to him, and will usually say what he thinks will most please you. So I was far from placing too much faith in their reports. Having procured two native hunters, I sent them out to get news of the whereabouts of the elephant, and in the meantime decided to try my luck with a third hunter after water-buck and kob, of which I had seen traces in the neighbourhood. The banks of the Mafou River are swampy and the ideal home of kob.

Here I managed to secure a fine beast, with the best head I had yet shot in West Africa. Pleased with my day's sport I returned to my camp at the village that afternoon, hoping to get some good news from my hunters. I was therefore much disappointed to be told that the elephant had not been seen in that district for some weeks, and the tracks seen by the hunters were at least a month old. I had myself that morning seen elephant tracks, close to a place where they had evidently been in the habit of bathing in the Mafou River. These tracks were likewise some weeks old. As there seemed no prospect of elephant in the neighbourhood, I decided to follow my

original plan of pushing on with as little delay as possible to the Wasulu country.

The next day I continued my journey to Kouroussa. It was always my custom to set out in the morning, just before daylight, and to have a start of about half an hour on my carriers. In this way one often got a chance of a shot at game while it was feeding within range of the bush path, and had not been disturbed by passers-by. I used to wear boots with noiseless soles, finding this a good plan for enabling me to approach without being heard. A bush path is a very sinuous affair as a rule, and it frequently happens that one suddenly turns a corner and comes in sight of game, quite as unaware of the proximity of man as you are of its presence. One morning, while walking thus ahead of my carriers, I suddenly espied a small duiker dart across the road, and was fortunate enough to get a snapshot at it before it disappeared into the bush. It proved to be a "crowned duiker," a beautiful little animal, only fifteen inches high. This small antelope is of a bright yellowish fawn colour, with remarkably long and pointed ears. The tail was short and blackish, more like the tail of most oribis. The horns were very small and delicate, but this little beast is uncommon, so my delight at securing it was great; moreover, I had never before seen it wild. The habit of all duikers is to conceal themselves in the bush, consequently one does not often see them unless a drive is organized, and this to me always appears rather an unsportsmanlike procedure.

This little antelope derives its name "crowned" from the dainty crownlike tuft on the top of its head. The duiker probably falls a victim, more than any other kind of antelope, to the native hunter. His method of killing game is distinctly brutal. When the bush is ready to be burnt, a number of hunters collect together and proceed with the boys of the village to the scene selected for the

BARO VILLAGE IN THE KOUROUSSA DISTRICT OF FRENCH GUINEA

The people of this district suffered very severely in the Sofa wars. King Samory spread fire and sword throughout the land, and carried off many of the people into slavery. The inhabitants of Baro have only returned and rebuilt their houses in recent years. They have the downtrodden, low-spirited nature of men who have lived many years in captivity.

sport. The hunters line up at a suitable place, on a path, down-wind. The boys are sent to drive the game in the direction of this path out of the bush. Their procedure is as follows: each person being equipped with a tomtom, an old tin, or some similar article capable of producing a noise, sets to work to make a tremendous din. At the same time the grass is set on fire. The unfortunate animals in the bush, scared out of their senses, dash the only way open to them, viz. towards the path on which are the hunters. As they appear, at a range of a dozen yards or less, they are received with a volley of scraps of old metal, iron nails and sharp stones, fired from the flint-lock guns of the sportsmen. The din is deafening, missiles are flying in all directions, and the carnage amongst the luckless little beasts is great. At the same time the shooting is decidedly wild, and it is a matter of congratulation that this is the case, for the slaughter is not so terrible as it would otherwise be. It is a marvel that these people do not often kill one another by their wild shooting. It is true occasionally a maimed native is seen who admits that he has been crippled in this manner, but on the whole the casualties are not so large as might be expected.

Another favourite method of killing game is by trapping it. The ordinary form of trap is a long barricade of sticks and palm leaves, built up to a height of several feet. At intervals in this hedge there are narrow openings, with a running noose cunningly concealed on the far side. A drive is organized and the animals are frightened through the bush in the direction of this barricade. On finding the openings they naturally endeavour to escape by them, but are caught by the noose as they struggle through. Traps of this nature are set for birds, as well as other small game. These barricades are frequently built as much as a mile long. Yet another form of trap I have often met with is simply a pit, dug to a depth of six or seven feet, at the

bottom of which is planted a stake, having the sharpened end sticking vertically upwards, ready to impale the unfortunate animal which falls upon it.

The pits are usually covered over with leaves, and are thus invisible to the unsuspecting victim. These snares are often as dangerous to strangers as to game, on account of this invisibility, and it is dangerous to wander in the bush of a hunting country without a local guide. On one occasion one of my porters strayed away from camp after dark. In the morning he was not forthcoming to carry his load when all was ready for the start. A comrade suddenly recollected that he had gone towards the bush the previous night, and it transpired that he had not since been seen. Search parties were at once organized and despatched in search of him. After some time they returned with a very pitiable-looking object, whose clothes were torn, and whose nether garments were smeared in blood. This proved to be the lost carrier. He had fallen into a hunter's pit some distance from camp, and all his cries for help had not been heard. Fortunately he was more frightened than hurt, and certainly profited by his experience, for he never wandered into strange bush again !

We had now left the belt of oil-palm country behind. The chief product of this district was rubber. The rubber is here the product of the rubber vine, and is seen in some quantities growing in the bush. But the majority of the rubber of French Guinea is grown in the east of the colony.

In the farms one notices particularly rice, maize and ground nuts. The latter is a pretty little plant with a small yellow flower. The nuts themeslves grow on the roots in the ground, something after the fashion of a potato. The fruit is ripe after the plant has flowered. On one plant will be found as many as fifty nuts. They are much relished as a form of diet by the native, while the

oil of the nut is a valuable thin oil, much used in Europe for making fine soaps, scents, and as a dressing similar to salad oil.

In the bush it is of the greatest use as a lamp oil, but must first be purified by straining through a thin cloth. For about three months I used nothing else, and found the light as good as that of a kerosene lamp.

The trader one encounters in the bush is the native trader, called the "Dioula." The European trader is only met with on the coast, or in the biggest markets of the interior. The term Dioula merits a word of explanation. These people are supposed to have originally been wandering Mohammedan merchants, but now the term applies to any travelling trader. The Dioula is a very thrifty individual, usually commencing life in a most humble way. He probably leaves his village with only a few francs in his pocket, which he exchanges at a suitable opportunity for some article of commerce, such as salt. He then travels a bit nearer to the coast, exchanging his salt for rubber or perhaps ground nuts. This process he continues, constantly bartering one article for another, until he finally reaches the coast. Here he purchases cloth, or some such European goods, and works his way back to the interior, bartering as he goes. These traders often accumulate quite big fortunes by their keen business instincts.

Kouroussa lies on a bare open plateau, overlooking the Niger. It is the centre of the district of the same name, and is increasing in size and importance daily. The cause of its growth is the Guinea Railway, emanating from the coast port of Konakry, and destined to reach Kouroussa in a very short time. The total length of this line will be about 400 miles. The object of the railway is to tap the trade of the Futa Jallon region, and the fertile country on the banks of the Niger. As the Niger is more or less navigable from Kouroussa for canoes and quite small

lighters, this will also open out a line of communication from the interior of the Soudan and French Guinea to the coast.

When I arrived at Kouroussa I went to pay my respects to the Commissioner. I found him contemplating a ruined building with a rueful eye. It was all that remained of his house. When I had introduced myself to him he proceeded to explain that the previous night his house had been burnt to the ground. The act was attributed to the spite of a native, who had been punished by him for some misdemeanour. Unfortunately it was difficult to collect proof against the man, and it appeared as if he would escape from the hands of justice. The people of this town are a strange mixture of several tribes. At or near this point three great races meet—the Susus, from South-Western Guinea, the Malinkés, from the south of the colony, and the Fulanis, from Futa Jallon, in the west. The consequence is that a hybrid race formed by the intermarriage of these different clans has sprung up. The natives are perhaps a higher class than the ordinary negro of Guinea. They inherit from the Fulanis a finer type of features, thinner lips and more aquiline noses. Their hair, however, remains woolly, and stamps them as undoubtedly negroid. They are chiefly agriculturists. Some, however, are cattle-men, owning considerable herds. They are distinctly lazy; this, perhaps, is hardly to be wondered at, as their country is fruitful and it needs but little work to get a living out of the soil. Besides, a man need only gather a small quantity of rubber in the bush to gain a livelihood.

At Kouroussa the French officials have a fine garden. Almost every kind of European vegetable is grown by them. The garden is personally supervised by one of the officers, who has a large number of native gardeners under his orders. From one year's end to another they are never

without some sort of vegetables. The garden is planted on the banks of the Niger, so that a constant supply of water is available. There is also a well-stocked fruit plantation, where one can enjoy a variety of tropical fruits such as oranges, pomegranates, bananas, etc. The French show a particular aptitude for gardening, and it was a point which struck me very forcibly that in almost every station where there was a European, a good garden would be found. On one evening of my stay at Kouroussa I witnessed the interesting and rather weird spectacle of a native dance. This particular dance was performed by some young girls, to the accompaniment of much tomtoming and cheering from the assembled throng of admiring onlookers.

These girls were dressed in short skirts, much resembling a ballet-dancer's skirt, but made out of a sort of bulrush very common in these parts. The bodice was a brightly coloured native cloth, twisted gracefully round the breast and waist. On the head was worn a bonnet of plumes of various hues. We were escorted to the place of honour by the side of the chief, who then clapped his hands as a sign for the performance to commence. The spectators were thronged in a circle round him, many being provided with tomtoms and musical instruments of all descriptions.

At the given signal the dancers dashed into the ring, joining hands and advancing with a graceful swinging step towards the chief, the tomtoms all this time playing a slow measure. The music gradually became faster and faster, while the dancers increased their pace in unison with it. Turning and twisting their lithe bodies, they now retired, at every step the music waxing faster and their pace becoming more frenzied. This performance was repeated many times, until the pace was so rapid and the dancers had got so exhausted as to no longer be able to keep time with the music. At this moment they flung themselves on the ground before the chief and the tom-

toms simultaneously ceased beating. It appeared evident that it was now we were expected to show our appreciation of the skill of the dancing-girls, so we rewarded each one with a small coin, after which they retired. Similar dances were executed by individual girls; in several cases they displayed remarkable agility and grace in their movements. The spectators were untiring in their tomtoming and applause, and it was evident that this dance was a most popular one.

Dancing is a very favourite amusement among West African natives. Every tribe has its special dances, some of which are far from graceful according to our ideas. There is, however, an undeniable fascination in seeing these weird black figures leaping and pirouetting in their picturesque costumes, with the strange glow of the firelight casting mysterious shadows on them as they move backwards and forwards.

In the vicinity of Kouroussa the natives keep a number of beehives. These hives are frequently seen stuck up in high trees. They are made out of reeds bound in the form of a hollow cylinder, having the ends closed with plastered mud. One of these mud doors has a hole in the centre, providing an entrance and exit for the bees. The negro has a great liking for sweet things, so a quantity of this honey is consumed. Before it can be eaten by the European it must be strained through a piece of muslin, as it is exceedingly dirty. When properly cleaned, however, it is excellent.

Wild fruit is scarce, and in any case should be partaken of with great caution, as there are several poisonous varieties. There is a kind of wild plum which is fairly common in this part of French Guinea and has a pleasant flavour. Occasionally wild bananas and pawpaws are met with; they almost invariably indicate the site of an old, abandoned village.

CHAPTER VI

Samory and the Sofas—The Sofa wars—Desertion of my "boy"—Kouroussa and Kankan—Native horses—An inhospitable reception—Kankan—Trade at Kankan—The rubber vine—Native telegraphy—Personal adornment.

MENTION has several times been made of King Samory and his Sofas. Kouroussa was for some time the centre of his plundering operations; it will therefore be advisable to give some account of this enlightened chief's history before describing his doings in that country.

Samory came from the neighbourhood of Bobodjilassu, an important town between the north of the "Gold Coast Northern Territories" and the Niger. He was a Mohammedan, and became a very influential chief on account of his strong personality.

He collected an army of between 30,000 and 40,000 men, and ravaged practically the whole of what is the colony of French Guinea, as well as a portion of the French Soudan and Sierra Leone Protectorate. His troops were first composed of Mandingoes from the Middle Niger, but gradually as he advanced he absorbed large numbers of other tribes whom he had subjugated, and the whole army was designated by the name of Sofas. For fifteen years he spread terror throughout the land, on several occasions even inflicting severe reverses on the French troops he encountered. He was finally captured by the French in 1897, and died in captivity three years later. His army was too large to be concentrated for any time, so had to disperse to obtain

supplies. This resulted in wholesale plunder and wanton devastation of the land. The natives hated the Sofas, who pillaged their homes and carried off their wives without any mercy.

Large districts were depopulated by their ravages; indeed, to this day the ruins of villages, which were abandoned during the Sofa wars, are frequently seen in the bush. It is only during the last few years that this part of West Africa has begun to settle down peacefully after the long period of plunder and wholesale murder which existed during the reign of King Samory.

A further cause of this prolonged warfare at this time was that when the Sofa lieutenants were not employing their soldiers on behalf of Samory, they were in the habit of letting their services out to anybody who was willing to pay for them. This system naturally led to a number of local small wars, thus further aggravating the harm done by Samory and his followers.

This chief was certainly the biggest native general ever encountered by European troops in West Africa. Many of his soldiers afterwards enlisted in British and French colonial corps, and proved themselves excellent fighting material.

In Kouroussa market-place there is a large baobab tree, under which Samory used to hold court. Here he used to try his prisoners, and here they used to be executed. That tree must have seen some horrible sights in its day. What tales it could tell of murder and injustice committed under its shady boughs! Baobab trees are common in these parts; nearly every village possesses one, and it is under these spreading branches that the chief and his followers are wont to sit and gossip during the heat of the day.

One of my carriers about this time was an oldish man, who had been a young warrior in Samory's army. He used to relate some blood-curdling stories over the camp

fire at night of the atrocities committed by that chief. The carrier had himself, it appeared, been a participator in some cruel acts. On one occasion he was sent with a party to exact tribute from a refractory town, with orders to inform the people they would be plundered and their town burnt unless they complied. He described with a great show of pride how he first extorted twice the required sum, and then proceeded to massacre the unfortunate, helpless inhabitants. Little wonder that Samory's soldiery was feared and mistrusted in those days of plunder and bloodshed.

On the morning of the 31st I had given my "boy" particular orders to call me early, in order to start on my way to Kankan. About five o'clock I woke, and could see no signs of my servant. This surprised me, as he was usually very punctual. I called, but receiving no reply, went out to investigate the cause of his non-appearance. On entering the kitchen it became evident that he had run away, for all his personal property had been removed. I never saw him again, and can only conclude that he had found the journey rather harder work than he had bargained for, and had decided to return to his native land before it was too late.

This incident was extremely annoying just as I was about to start for my shooting-ground, and I was much afraid it would be impossible to get a "boy" suited to my requirements in the place. Fortune, however, favoured me, and the District Commissioner assured me he would be able to procure a cook who could speak French and Bambara in a few hours. I decided to march off, on the understanding that the "boy" would follow and meet me that evening in camp. True to his promises, the Commissioner sent me the servant, who remained with me until I reached Timbuctu. His name was Mamadu; he had many faults and was hardly the sort of "boy" I should have chosen, but I was

lucky to get one at all, and after all he possessed one or two good qualities, and could bake bread better than any native servant I had yet had.

Mamadu's chief fault was his irrepressible tongue. I made many efforts, both by gentle and strong means, to curb this bad habit while he was with me, but have to acknowledge complete failure. Incessant chatter is a failing of most negro tribes, but I never met such an inveterate talker as Mamadu before, nor am I likely to do so again. At night he would be talking when one wanted to go to sleep, and in the early morning I was generally wakened by his unceasing chatter. When he slept and what he had to talk about were two problems I never succeeded in solving.

At Kouroussa the Niger is about 250 yards wide, and here there is a canoe ferry to the point on the opposite shore where the Kankan road commences. As I mentioned before, the Niger is partially navigable from here to Bamako, a distance of about 200 miles. Navigation is frequently interrupted by sandbanks, which are fairly common in this part of the stream. At such places canoes have to be unloaded, and the contents carried to the other side of the obstruction, where fresh canoes are in waiting—a somewhat tedious and slow process.

There is a remarkable scarcity of waterfowl on the Niger above Bamako. I do not recollect seeing a single duck or goose on this section of the river, although occasionally I saw a few teal. It is true that the river was rather dry at this time, but I was informed by French officials that it was very unusual to find duck at any time of year in the upper reaches of the Niger.

The country between Kouroussa and Kankan consists of rather thick bush, except for a stretch of more open grass-land between the Niger and its tributary the Niandan. Rice is rather scarce in this region. The native

lives principally on sweet potatoes and cassada. The Niandan is a stream of no great size, but with a very rapid current. It is not too deep to be fordable, but the swiftness of the current makes it dangerous to try the experiment. It was here that I first saw horses in any numbers during my journey, so we were evidently out of the tsetse fly belt, which is so fatal to these animals. An old chief rode up to the stream as we arrived, mounted on a horse with gay trappings, and his toes thrust into the curious, heavy iron stirrups always used in West Africa. The saddles are made of wood, with a high back, and are extremely hard, although not otherwise uncomfortable. The wickedest part of the saddlery is the bit. This is made of rough iron, having a ring through which the animal's tongue is thrust, and a cruel spike so fashioned as to stab the roof of the horse's mouth each time the reins are pulled; the inevitable consequence being that a horse's mouth is almost always spoilt when he is young, and is usually in a lacerated condition. Malinkés are good riders, but atrocious horsemasters. Horses are generally ridden too young, frequently getting their backs strained from this cause. Animals here average about thirteen hands or less, and it is seldom that a good beast is seen, owing to the system of inbreeding which prevails.

The horses in this part of the country are not bred locally, but are imported from the south of French Soudan. Indeed, I much doubt if horses are ever bred in French Guinea, or anyhow in the eastern half of the colony.

The native's chief delight is to gallop. He will often be seen careering along at racing speed, for no reason whatever except that he appears to think that the horse is only born to carry him at the top of its pace. These people are very fond of horse-races. Here, too, their one idea is to gallop hard the whole distance. Their knowledge of the staying powers of their animals seems to be strangely lacking. The

result is that their horses finish at a snail's pace and are quite exhausted. Besides, horses are generally grass-fed, and consequently very soft. In spite of all the bad treatment he suffers from, the native pony is frequently a hardy little animal, capable of doing a long day's work, making one wonder what he might not be able to do if breeding were carefully attended to and the animals were well looked after.

I had no difficulty all this time in keeping the larder well supplied with birds, while an occasional buck brought joy to the carriers' hearts. Bush-fowl and guinea fowl were sufficiently numerous in the farms on the roadside to provide for my wants. The day of my arrival at Kankan I had started in the morning, as was my custom, before the carriers, with my shot-gun on my shoulder, intending to do a little shooting on the way. Having secured all I wanted, I pressed on to the town, accompanied by one man to carry the birds. I have no doubt I looked an extremely uncouth and grimy figure, for I had been walking for some hours, and the road was hot and dusty. My costume, too, no doubt looked strange, consisting as it did of khaki shooting-breeches cut short at the knee and a rough khaki flannel shirt, open at the collar, with the sleeves rolled up to the elbow. In spite of my curious appearance, however, I was much amazed to be mistaken for a villain intent on taking the life of the French Commissioner! Yet such was the case.

On approaching the European quarter I observed a native policeman, whom I asked to direct me to the Commissioner's house. This individual, to my surprise, immediately seized me and attempted to wrench the gun out of my hand. It was with difficulty that I restrained my anger in time to prevent myself striking him, so sudden and unexpected was the onslaught. Fortunately at this moment the Commissioner, hearing the commotion, came

out of his office, and matters were satisfactorily explained. It appeared that some time previously a native who bore a grudge against the Commissioner had attempted to shoot him, hence the policeman had been on the alert in case of another attempt. My black friend, in the zeal of performing his duty, had jumped to the conclusion that I was a would-be assassin, and had lost no time in trying to deprive me of my gun in consequence. I was much sunburnt at that time, and it is possible that I looked to his excited imagination almost as dark as his coloured brethren! That evening I dined with the official and his wife, and we laughed heartily over the dramatic nature of my arrival into Kankan.

I was rather surprised to find a French lady so far from the haunts of civilization, but was informed that there were two more ladies, the wives of French traders, in the town. The traveller in the bush cannot but be struck with the refinement brought by a woman's presence to a lonely West African station. Colonials necessarily grow rough in their habits when removed from the gentle influence of woman's society. In her presence the roughest of mankind feels softened, and his better nature seems brought to the front.

Kankan is a large town of 12,000 inhabitants. It owes its importance to its position in the centre of the rubber-growing district of Guinea. Moreover, before the appearance of the white man and the consequent development of the rubber trade, Kankan had for many years been a large native market. Probably the reason of this is that it lies on the Milo River, one of the few tributaries on this bank of the Niger which are navigable to any extent. From Kankan the French traders are enabled, by using this stream, to send boats with produce direct either to Bamako or Kouroussa.

There are no less than fourteen French trading firms

established at this place. Their chief business is, of course, done in rubber. In addition to rubber, a large quantity of ground nuts, rice, millet and gum copal pass through this large market, while Moors from the north of the Senegal River, and Fulanis from the Middle Niger, bring herds of cattle for sale to the town. It is indeed an amusing sight to wander through the market-place in the morning, when it is crowded with a cosmopolitan collection of coloured races. People of every shade of colour will be seen. There is the negro from the coast, with a face almost as black as coal, jostling against the reddish-complexioned Fulanis and the pale-coloured Moors, while men and women of every intermediate hue are also to be seen. The babel of voices in many different tongues is most remarkable, and the French traders used to tell me that they require interpreters in about half a dozen different languages in their stores, for so varied is the speech of their customers.

At Kankan I saw for the first time those curious bars of salt transported from the desert salt-mines of the Sahara. They are brought many hundreds of miles for sale in the interior of Guinea, where salt is an article of considerable value. These bars weigh fifty to sixty pounds, and are here sold for as much as thirty francs. In the district of Kankan nearly every native is employed collecting rubber in the bush, which he brings to the French merchants for sale. The rubber vine grows in extraordinary profusion to the north and east of the district. On the latter side its range extends into the north of the Ivory Coast Colony. The vine should not be tapped before it is four years old, when the plant is about as thick as a man's wrist. Unless it is cut in a spiral fashion the plant will be killed. Much harm was done to the rubber trade by the natives a few years ago by the wasteful manner in which they tapped the vines. They used to make deep, circular gashes completely round them, as by this means they were able to get

NATIVE TYPES AT KANKAN

This place is a big rubber market of French Guinea. Rubber commands a good price, so most of the natives are well-to-do, as may be judged by their prosperous appearance. The country east of Kankan is prolific in rubber vines, and the labour entailed in tapping the vine is very small.

the sap out more easily, quite heedless of the fact that by so doing they were killing the plants. Strict legislation has now been introduced to prevent this wasteful and wanton destruction. When I first saw men tapping rubber vines I was surprised to notice they invariably rubbed the place where the incision was made with some dirty-looking liquid. I was informed that this liquid was lime juice and water, the object being to cause the rubber to agglomerate as it exuded from the incision.

Rubber is collected in balls, which have a dirty greyish appearance, and it is in this form that it is sold to the merchants. To increase the weight of these balls it is a common practice for the wily natives to mix water with the rubber, or to place mud or some heavy substance in the interior. These tricks are now becoming well known to the European trader, who is not often deceived by them, although, when the ruse was first started, I understand it met with considerable success. It is probable that a large portion of French Guinea will be entirely devoted to the rubber trade in the future, for it is mostly a rather scrubby bush-country eminently suited to this particular commerce. Owing to the large and increasing demand for rubber at the present time, Guinea rubber, which is of good quality, commands a high price in France.

At Kankan I had to change my carriers, and here I arranged to send all the kit which I did not require on to Bamako, while only taking a month's stores, my rifles and camp equipment, on my shooting trip into Wasulu country. After an interview with one of the French trading firms, it was settled that my surplus baggage should be forwarded in their lighters by river to Bamako, where I would find it on my arrival at that place.

My carriers were now reduced to eight, and with this small party I set out on the 3rd of February. For the first few miles the road was the main route to the gold-mining

district of Siguiri, a fine, broad highway which joins Kankan to the town of that name, a distance of sixty miles. After leaving this road we turned into a small bush path, striking nearly due east into the heart of the Wasulu country. At Niansumana the Milo River is crossed. It is a stream about 100 yards wide, which we found fordable at this season. That evening I observed a big drum in the chief's compound, and thinking it might be of some service to me, I inquired whether the village would send word of my approach to the town of Falama, and ask if the hunters I required were ready. The chief readily acquiesced, stating that within an hour the people of Falama would have knowledge of the message. Falama was nearly fifty miles from Niansumana, so that I was anxious to see if the experiment would really be successful. In less than three hours a reply had come from the hunters to say they were ready awaiting me.

These drums are much used for signalling in this part of the country, and without doubt account for the rapidity with which news becomes known at a considerable distance from the spot where it originates. The drums are made of a rough piece of log hollowed out, often as much as four feet long, with the ends covered with goat's skin stretched taut. The drummer beats on the end with a couple of sticks, or with his hands. It is wonderful how skilled they are about sending quite long messages in this way. Of course, every native does not understand the drum language. An expert ear is necessary to send as well as to read a message. When war is declared the inhabitants of the surrounding villages are all made aware of the news by a drum message. In fact, when rapidity is an object, the natives prefer to send their messages this way rather than by messenger. The drum is in common use in many West African countries. It is frequently used to call the people together for a palaver, and can be heard

by men working in the most distant farms, who at once obey the signal, leaving their crops to return to the town.

We were now getting into a more open country watered by numerous streams, most of which flowed north-west into the Niger. Villages were becoming scarcer, and it was evident that the country was more thinly populated. I was careful at each village I passed to make inquiries for game, but it appeared that the game country hardly started before the Sankarani River, which I should cross before arriving at Falama. Cattle were far more numerous here than I had yet seen them. The milk was exceedingly rich, and I was always supplied with a large bowl of it on camping near a village. The people were mostly cattle-men, and were a fine stalwart race. The men must average five feet ten inches. The women are considerably smaller. The latter go in for a great deal of personal adornment. Their hair is dressed in small ringlets, screwed up tightly to the side of the head, giving them a decidedly comical appearance, and hardly enhancing their rather doubtful claims to good looks. The wealthier women wear a large amount of cheap jewellery. Their fingers and toes are decorated with silver rings, generally about as thick as a lady's bracelet in England. Their necks are freely adorned with necklaces of large yellow or blue beads. Like most native women, they are extremely fond of bright-coloured dresses.

CHAPTER VII

Hippopotami—Game in the Wasulu country—Lazy carriers—In pursuit of elephants—Fetish haartebeest—"Red" elephants—A fetish altar—Braimah's juju—Charms and tests.

AT Falama I found the two hunters I had engaged for my shooting expedition. They were the head hunters of the district, one of them being a man from the big hunting village of Dialakoro, who was reputed to know every yard of the game haunts in the Wasulu country, so it was with high hopes of good sport that I began to talk over plans with these two local celebrities. The Sankarani River runs in a semicircle round the village of Falama, at a distance varying from one to three miles from the place. I was informed that there was a hippopotamus pool in the river, so I decided to bend my steps thither that afternoon, on the chance of getting a hippo and also with a view to seeing the nature of the country from a shooting standpoint.

Taking Braimah, the expert from Dialakoro, with me I set out about 3 p.m. We traversed a patch of grass-country, in which I saw traces of kob and waterbuck, for about a couple of miles before reaching the river. Braimah led me to a well-worn hippo path in some rather thick undergrowth near the river-bank, on the off-chance of finding a hippo on land. After twisting and winding for some time in this thicket, I heard the movements of a ponderous body in front of us. This was without doubt the beast we were hunting, and sure enough in a few minutes, after some careful stalking through the bush, I caught sight of him.

He was within fifty yards, and had just turned broadside on to listen, with his piglike eyes looking in our direction. His massive form was plainly outlined at that distance, as fortunately the bush was a little thinner here. A shot from my ·450 rifle rolled him over, hitting him in the heart. After this we made our way to the pool, taking up a concealed position on the river bank. Three or four hippos shortly appeared, frolicking in the clear, cool water of the pool. For some time I lay in the shady refuge of the bushes, watching their playful anties. It was an amusing sight to see these huge monsters gradually and lazily raising their big heads out of the water, until finally with a snort the whole head was thrust out to full view, when, after drawing a deep breath, they would suddenly disappear beneath the calm waters of the stream. After for some time watching this pretty scene and regretting I had not brought my camera, I decided to have a shot at a big bull who was in the party. The best shot at a hippo in the water is one directed at his nostrils, which can be seen when he thus raises his head. Consequently the next time my friend appeared I fired at this spot. It took three shots before I was satisfied I had killed him, and then I turned away rather disgusted with the sport, for hippos are harmless creatures and the amusement derived from shooting them does not give one much satisfaction.

I have heard some men give the hippo credit for being vicious, but personally I am of opinion that he will never wilfully harm anyone. It is true they have been known frequently to overturn canoes on a river, but I cannot help thinking that, when this does occur, it is purely an accident, for the hippo is very blind and it is quite conceivable that he may often raise his big head just underneath a canoe without being aware of the latter's presence. On leaving the pool we soon picked up the tracks of a herd of kob, which had recently passed that way. There was still

an hour and a half before dark, so I decided to follow them. We were now once more in the open grass-land where the grass had been burnt in patches. Proceeding cautiously up-wind, for these antelopes have a very keen sense of hearing and smell, we espied the herd peacefully grazing in the distance. After a careful stalk of 400 or 500 yards I managed to secure a fair-sized male. It was now nearly dark, so we proceeded towards camp. Parties were sent out to bring in the meat of the first hippo and of the kob, and all the village was full of joy at the prospect of plenty of "beef."

The second hippo would have to be left till the following day, for they sink when shot and the bodies do not float for about twenty-four hours. A message was sent to the fishermen down-stream to look out for the animal, and to bring it in as soon as it was found. They were to have the meat on condition they brought me the tusks, an arrangement which pleased everybody!

I had arranged with my hunters to proceed the next day to a place called Doulajan, sixteen miles east, where they reported that I would be in the centre of the elephant country. As my chief object in visiting the Wasulu country was to hunt elephant, and my time was limited, I was anxious to reach this locality as soon as practicable. That day, after making my plans, I had already despatched the second hunter to Doulajan to get all news of the elephants' whereabouts at that time and to meet me on my arrival at camp, or as soon after as possible.

The next morning, as we set out, my heart was light at the prospects of some really good sport, for I had every reason to believe I was within easy reach of the elephant, and from all accounts there were some fine tuskers among them.

That day, however, was doomed to be a day of annoyance and disappointment. Leaving my carriers to follow

by the ordinary road, I and Braimah were to leave before dawn by a small hunters' track, known only to himself, which would lead us through a favourite haunt of waterbuck. I ordered my " boy " to meet me at a place where the two paths crossed, at eleven for breakfast.

After a very hot and disappointing walk, during which I saw not a single trace of waterbuck, we arrived at the place where I proposed to breakfast. My carriers and servant had not arrived, so I got a hut swept out by the chief and composed myself for a little sleep. I was feeling fatigued, after the early start and the heat of the day, so I slept for some hours and woke to find it was three o'clock and still no sign of my carriers. I began to be uneasy that some might have run away and could not be replaced. I was also by this time uncommonly hungry, and decided to get some food from the chief and then set out with Braimah to look for my " boy " Mamadu. After a refreshing meal of fresh milk and pawpaw, I felt fortified once more and departed with my hunter in quest of the missing carriers and "boy." We had gone three or four miles, I suppose, when I heard a chattering proceeding from a tree close to the path just in front of us. On turning a corner we came into full view of Mamadu, the carriers and the loads all under a shady tree. The men seemed to be enjoying themselves vastly and not to be in the least concerned about me ! My wrath can be more easily imagined than described at the spectacle thus disclosed. Here had I been waiting several hours for these lazy scoundrels and imagining all sorts of disasters that might have befallen them, when all the time they were simply loafing and enjoying a rest on the roadside. They jumped up pretty sharply on my appearance, and proceeded to place their loads on their heads. Mamadu was of course full of excuses to account for the delay, but I fear he so perjured himself as to lose any chance of a seat in heaven. The most annoying

feature of the business was that I should not now be able to reach my shooting-camp at Doulajan that night. And it appeared that the only reason for all this delay was that my servant might enjoy his silly habit of chattering!

It was quite dark when we reached the village where I should have breakfasted, and here another disappointment awaited me. The hunter I had sent to Doulajan had arrived with news, as I hoped, of the elephant. His information was distinctly disheartening. He stated that some hunters from the south of Wasulu had been among the herd a few days previously and had driven them some distance east of their previous feeding-ground. In fact, he stated that it was rumoured the animals had gone almost to Odienné, which I knew to be five or six days' march from Doulajan. The only thing to be done was to go on to Doulajan next day and follow up the elephants if there seemed any chance of overtaking them within a reasonable time.

The place I selected for my camp was on the banks of a small stream, about five miles from the village of Doulajan. Here I pitched my tent, which had hardly as yet come into requisition. The spot was a delightful shady place, which seemed a veritable haunt of wild game, judging by the numerous tracks of animals coming down to drink at the stream hard by. I had procured a third local hunter, and now sent two men off to get more definite news of the elephant, while I kept one with me for shooting purposes near my camp.

These hunters are strongly imbued with ideas of fetish. Braimah had a long flint-lock gun of which he was inordinately proud. To a native his gun is an object more to be cherished than his child. He carries it with him everywhere, even when going to his peaceful farm where there is no danger from man nor the likelihood of his seeing any wild beast. This particular gun was decorated

with every imaginable sort of "juju," or fetish charms. Panthers' claws, lions' teeth, antelope horns and pieces of waterbuck's hide adorned the stock. The butt had a piece of elephant tail freely smeared in the blood of the wild boar tied upon it. The latter animal is particularly venerated for the good luck it is supposed to bring to the sportsman.

Our camp was on more than one occasion visited by the wild beasts of the neighbourhood. Leopards and hyenas were fairly numerous here, while the deep musical roar of the lion was frequently heard resounding through the bush at night.

One morning as I was making my toilet preparatory to an early start on a hunting trip, I saw the beautiful sight of a herd of about fifteen West African haartebeest coming down to drink at the stream. My attention was at first attracted by hearing the thundering of many hoofs on the stony ground outside the camp. Rifle in hand I cautiously crept out of my tent, and soon they came into full view, never suspecting the near presence of man, for our camp was well concealed in the trees and they did not get our wind. There is something awe-inspiring to my mind at the spectacle of wild animals when they are unaware of the proximity of man and are seen thus in their native haunts. Game is always most beautiful when it is most natural and unalarmed. It makes one feel a brute to shoot it, thereby destroying the life of a fine creature.

The West African haartebeest here were the best I saw during my travels, and I secured two very good heads. These animals were numerous in the Wasulu country, herds of twelve or fifteen being frequently seen, although I never saw them in larger numbers than this. This animal is, I suppose, quite the most clumsy-looking of all West African antelopes, its curious, ill-shaped head and lumbering gait reminding one more of a donkey than any

other animal. I spent three days thus and enjoyed some good sport with antelope. During my expeditions I used to come across tracks of elephant fairly often. These appeared to be at least a month old, and I began to doubt the veracity of the statement that these animals had been seen here more recently than that. It seemed to me evident that they had retired towards the better watered country in the direction of the Ivory Coast forest some considerable time previously.

The dry season was now in full swing and streams in the Wasulu district were drying up rapidly. I observed two distinctly different kinds of tracks. One lot appeared to be those of the ordinary elephant, while the other lot seemed to belong to a smaller species of that beast. On discussing the matter with my hunter he confirmed my theory by stating that the smaller tracks were those of a herd of the " red " elephant. This animal I had never yet seen, but had heard it mentioned for the first time by some French friends. At Faranah they had again told me of its existence. So I was very eager to get a specimen. The elephant appears to be of a reddish grey hue, probably terra-cotta would be a better description, and to the best of my belief is peculiar to this region, although as I never saw one, nor could I even see the skin of one in the district, I am not in a position to give any more authentic information on the point. It has the reputation of being very fierce, and is said to charge without provocation, but I am inclined to believe this is an exaggeration. It is certainly a good deal smaller than the ordinary African elephant, and carries quite small tusks by all accounts.

That day my two hunters returned, and much to my disappointment their reports of the elephant were most discouraging, and made me only more certain that the animals had left our vicinity some time back, which would make my chance of ever coming up with them exceedingly

remote. The same evening I got news, however, from the chief of Doulajan that he had heard on the most reliable authority that the herd had been seen at a place three days' march from our camp, close to Odienné. I at once determined to proceed there on the chance of there being some truth in the yarn, although I must confess that I was not very sanguine as to the success of my quest.

Striking camp at an early hour in the morning, we marched for three days through a more wooded country, gradually verging into forest-land. Tracks of elephant were numerous, but these were by no means fresh. Finally, I was forced to abandon the enterprise, for I was daily getting farther and farther from my northerly route, and could afford no more time to spend in hunting in this country.

The dense forest we were now in reminded me how extremely difficult it is to see these huge beasts in country of this nature. I recollect once when tracking a large herd from an early hour until late in the afternoon, through a swampy country, I had quite lost all traces of them and began to despair of finding them again. I was on the point of turning homewards, but thought I would first cross a neighbouring swamp to have some lunch on the opposite bank, which appeared dry. Being on the point of sitting down I suddenly observed what appeared to be a moving leaf. On closer inspection it proved to be the ear of an elephant not more than twenty yards away and concealed in the foliage. A little manœuvring resulted in a successful stalk, and the animal, which was a fine tusker, was bagged. These beasts, although not actually deaf, get so accustomed to forest sounds that they had never heard our somewhat noisy approach across the swamp.

My plan was to return to Falama on the Sankarani River, where I had arranged for fresh carriers to meet me, and from thence to proceed to Bamako by the shortest

route. The hunting villages which are passed in this district gave a very fair indication of the game to be found in the neighbourhood. It is the custom to erect outside the village a high altar, built up with the horns of antelope and the skulls of almost every conceivable beast shot by the local hunting people. This altar is erected for fetish purposes, the heads being allowed to remain there till they rot. The native hunter has no sense of sport as we look upon it. He kills wild animals primarily for the meat he will get, and, as trophies of the chase, horns and skins have no value in his eyes. Some of the more dangerous animals may sometimes be hunted for the danger involved in attacking them, but even then it is done more out of bravado than from the love and excitement of the sport.

One of my hunters had a native flute which he would play at night in camp to amuse himself and his companions. The instrument is a very simple one, made out of a reed-cane, having a few holes punched in it to form the notes, and a roughly shaped mouthpiece. The music is melancholy, and by no means disagreeable. He was a lithely built, active fellow, making a picturesque figure as he sat in the glow of the firelight playing strange native melodies on his instrument.

Braimah had a greater weakness for "Juju" than the others. His chief care, after seeing to his gun before our start every morning, was to find out if Diana intended to favour our sport that day. The method adopted to carry out this test was a curious one. The only things necessary to work the charm were two kola nuts. His procedure was as follows:

A kola was taken in each hand and some mystic words were then muttered over them, the gist of which was, as far as I could understand, something like this: "May the God of the Chase grant me good fortune, and may he cause these two kolas to point towards me."

The kolas were then thrown in the air, and the way in which they landed on the ground decided the luck that was going to be his that day. If the two kolas fell with their ends both pointing towards the thrower all would be well. On the other hand, if the kolas, when they reached the earth, had the pointed ends turned away from Braimah, then the God of Hunting was full of wrath and would not be appeased that day. If one nut was pointing towards him and the other in the inverse direction, the operation had to be repeated three times before a definite decision could be arrived at. It must be explained for the benefit of those who have never seen a kola nut that one end is more pointed than the other. The shape of the nut resembles that of a Brazil nut, a sort of pyramid on a triangular base, and the colour is either white or pink.

Braimah's trick, I noticed, often did not give a correct forecast of the day's performances. When I tackled him on this point he always had some ready excuse on his tongue, and I never succeeded in shaking his conviction of the infallibility of the charm. As a matter of fact, a native has such a strongly rooted belief in his various fetishes and superstitions that it seems quite impossible ever to shake it. Of course, in many cases, when fetishes are in the hands of "medicine-men," these people are so crafty that the particular charm they are working appears never to fail. I have in mind the charm used for the purpose of testing adultery among certain tribes. In this case the accused is told to drink a mixture made of the infusion of leaves of the cotton tree and some other ingredients, the reasoning being that if he drinks it and vomits he is innocent, but if he is guilty he will die in agonies. As a matter of fact, the result is a foregone conclusion, for if the "medicine-man" wishes the death of his victim he merely puts a little deadly poison into the concoction, thereby producing the desired result, while the natural property of the mixture is to

make the imbiber vomit. This performance is carried out in the midst of the congregated villagers, so that the effect produced on their ignorant and superstitious minds is tremendous.

If the accused man is rich, he can generally buy his innocence by a judicious bribe paid to the "medicine-man." Fetish priests wield great power over the people in West Africa. Their influence is in a way similar to that of the "Mullahs" in the East among Mohammedans. The latter stir up the people to mad religious fervour by their frenzied preachings in much the same manner that the fetish priest excites the minds of his hearers.

CHAPTER VIII

Mamadu's new hat—Tribal marks—Unreliable guides—A lonely prospector—Bolting carriers—A local chief—More trouble with carriers—Hunting eland—Sand-flies and mosquitoes—The headman's duty—Undesirable presents—Jomongonas—A magnificent view—Jilingé—Gold—Superstition of the River Fie—A Niger ferry—An unappreciated delicacy—Fishing on the Niger.

AT Falama I procured the requisite carriers from the chief. It was arranged that they should accompany me all the way to the Niger, should I find any difficulty in replacing them before that river was reached. I was particularly careful to have this explained to each individual carrier in the presence of his chief, for I had had some experience of the difficulty of keeping these men to their promises already. A favourite trick of this class of gentleman is, after being most fervent in his protests of wishing for no happier lot than to accompany you as far as you want to go, suddenly, and generally at a most awkward moment, to casually cast your belongings into the bush and run away. One has in such cases nothing but the grim consolation that he has deprived himself of his pay, which is but poor satisfaction for the annoyance and inconvenience he causes you. The chief of Falama was a man of some influence, being also one of the leading magnates of the Wasulu country. I therefore hoped that his authority would be sufficient to ensure their remaining faithful to me.

At Falama Mamadu invested in a new hat. This was a wonderful bit of head-gear. The hat was made of plaited straw of several bright colours, among which green and

red were most prominent. It was made with a very wide brim, and the top worked up to a point, in conical fashion. It certainly had the advantage of protecting him from the glare of the sun, for it was at least two sizes too big for him, so that it descended right over his eyes and almost rested on the bridge of his nose. He was greatly pleased with his new purchase, bringing it to me to show off with much pride.

Among my new carriers I noticed one with different tribal marks from the rest. On inquiry I was told he came from the Sanafou country near the Ivory Coast Colony. His face was beautifully decorated with four semicircular gashes, each about a quarter of an inch wide, down both sides. These cuts started on the temple about on the level of the eyes, and went right down the cheeks to the mouth, at which point they converged. They certainly gave him a very remarkable appearance, rather suggestive at a distance of the black marks put on the face of a clown in a circus. A good knowledge of tribal marks will often enable one to tell the tribe of a man at sight. They are not, however, an infallible proof of the tribe of an individual, for sometimes a boy, when taken into slavery, will have the marks of his master's tribe cut upon his face. Some races do not practise the custom of tribal marks. But it is generally done in all pagan nations. The Wasulu marks consisted of two or three very thin cuts made vertically down each cheek, usually not more than three inches long. The marks were often so slight as not to be noticeable except at close quarters.

My shortest road was across the Sankarani River, then up the valley of the Fie, finally crossing the Niger a little south of Kangaba, and following its left bank to Bamako. A reliable guide was an unknown article in these parts. The natives of this region are not traders, consequently they travel little. I had to depend on getting a guide day

by day to lead me through the bush-country which intervened between me and the Niger; but once on the other side of that stream, there was said to be an excellent road leading to Bamako.

The first part of the journey lay across hills of laterite rock. Our track could only by courtesy be dignified by the name of a path. The country was practically uninhabited, although, as usual in this district, there were numerous traces of ruined villages, all testifying to the devastations of Samory.

At one place I saw the remains of a hut, rapidly falling into decay. I was rather surprised to observe a weather-beaten old board nailed on a tree opposite the door. This board had some writing on it, which was with difficulty decipherable. It stated that a man called Paul Rieu had for two years made his home in that hut, where he had stayed while seeking gold in the vicinity. As a proof of his words I could see pits dug at the small river near by, and evidently made by him during his search for the precious metal. He must have been all alone; and what a dreary life to lead in this desolate spot, with nothing but the wild African bush for miles on all sides! I conclude his search was not successful. The poor fellow must have gone away disappointed after two years of lonely toiling under the hot tropical sun.

After this the country began to get more open, and it was evident that we were rapidly descending towards the Sankarani River. We passed through a wide grassy plain on to the right bank of the river. It looked a likely place for kob, which are fond of the marshy swamps bordering on streams; but though I saw some fairly fresh tracks we did not come across any of these antelope. The river is about 100 yards wide here, and has a very swift current. I looked in vain for a canoe, as it was impossible to ford it. In the distance we could see a village on the far bank,

but the people could not, or would not, hear our repeated shouts. A few shots from my rifle eventually brought out some men who half hid in the bush, thinking we were come to "make war." Probably the last time they had heard rifles fired was during the Sofa war, and the unaccustomed sound called up unwelcome memories of rapine and slaughter. With some difficulty I managed to reassure them, and proceeded to explain we merely wanted a canoe to convey us and our belongings to the other shore.

We halted at the village, which was called Balandougou, and it was here that my troubles with the porters commenced.

In the afternoon I had been out to see if I could pick up a few bushfowl on some likely-looking farms close by, and on my return was met by Mamadu, who told me that he had heard the carriers talking about deserting me. Although I only wanted eight men, I was aware that it would be extremely hard to get any to replace them at this village, which had only a score of inhabitants, mostly decrepit men and women or quite young children. I was therefore determined not to give them the opportunity of bolting. Further, I was much annoyed at their faithless behaviour, after their promises to accompany me until I reached the Niger, if necessary. I summoned them at once, telling them I had knowledge of their intention to desert, and that any man attempting to do so would be flogged. They all denied they had ever been guilty of such a base thought! But, needless to say, I did not believe them. That night I made them all sleep in the same hut, pitching my camp bed outside one exit, while Mamadu was made to sleep outside the other.

This little arrangement successfully stopped them from carrying out any projects they might have formed. Next day I had to take precautions on the march to prevent their defection. I constituted myself rearguard, making

my servant walk beside the leading carrier, and in this order we proceeded until we arrived at a large village about eleven o'clock. Here I decided to halt for breakfast and interview the headman with a view to getting fresh porters. As a matter of fact, the headman of the place was a local chief of some importance, as I soon perceived, when he arrived dressed in a finely embroidered gown and wearing a sword. Certain chiefs in Guinea are allowed by the French to wear swords as a mark of rank. He came with a picturesque following of courtiers, such as these men love to surround themselves with.

They have usually several advisers among them, and it is quite amusing to notice how the advisers often rule their king. Frequently, when asking a chief a question, one will notice that he is not even given the chance of answering for himself ; his so-called adviser chips in with his answer before the chief has time to open his mouth ! They came to the hut which had been prepared for my breakfast, sitting down at my invitation. After a lengthy palaver it was settled that eight carriers were to be sent to the spot where I should camp that night to replace my present gang. This seemed preferable to the alternative of waiting here till evening for the young men to come in from their farms, where they were now at work. I despatched Mamadu to inform my porters that they would be released that same night as soon as their reliefs arrived, and then settled myself down to breakfast. It never occurred to me that it would be necessary to any longer keep guard over them, as they now knew they would so soon be released.

After my meal I went outside the hut for a stroll, when to my disgust I saw only three carriers remaining, while a couple of them were just to be seen running as fast as their legs would carry them towards the bush in the distance. Having threatened the remaining three with

dire vengeance should they try to follow their comrades, I despatched Mamadu to the chief to order him to have the defaulters caught without delay. At the end of a couple of hours the fugitives were brought back, and I was able to proceed on my journey. We resumed the march in the same order as that morning, for it was obviously not safe to let them go unguarded.

All the time I was rather anxious as to the chances of the chief fulfilling his promises about sending me the fresh carriers that night. However, there was nothing to be done but to hope for the best, and in the meantime to keep a sharp eye on my present porters. That night I halted at a small stream, which was the only water within some miles, and was the place where I had directed the new carriers to meet me. I did not much relish the prospects of the evening before me ; keeping a watch on the would-be truants and slumber were two things that would hardly reconcile themselves without the assistance of the friendly hut of yesterday. About 9 p.m., however, to my joy, I heard a commotion outside the small camp, and on going out of my tent found it indicated the arrival of the carriers from the previous halting-place. The chief had after all been honest to his promises, and I had been unjust to his majesty.

The following morning I made a very early start, about four o'clock, with the intention of trying for a West African eland. My " boy " and carriers were to go on to a small village only some ten miles away, where I would join them that night. I had been told that eland were to be found in this neighbourhood, and had myself seen tracks of one the previous day. Not having time to wait more than a day in that part of the country, I did not feel inclined to go away without trying my luck after one of these fine animals. The eland is one of the very largest of West African antelopes, and is decidedly rare. The horns make a

splendid trophy, which I was most anxious to add, if possible, to my collection. One of my new carriers professed to be a hunting-man out of work and to know the country well, so I had arranged to take him with me. We were now on the watershed between the Rivers Fie and Sankarani, a rather sparsely wooded country, intersected by several small streams which flowed down on either side to join the two big rivers in due course. The haunts of the eland were said to be on the eastern side towards the Sankarani River, whither we directed our steps.

The ground slopes gradually here down to the river, and was some of the prettiest scenery I had seen since my entry into French Guinea. Large stretches of open grassland alternated with park-like country, and occasionally one came on a more thickly wooded part, through which ran sylvan glades, carpeted with emerald-green grass, by the side of which flowed a tiny stream of crystal water. The spot seemed a paradise for game of all sorts, judging by the numerous tracks. My time was too limited, unfortunately, to allow of other game than eland to be pursued. I must own I felt sorry now that I had not come straight to this place instead of spending those last few days in Wasulu on a fruitless expedition after the elephant. I simply could not afford to spend more than the single day in this pleasant game-haunted locality. My plan was to devote all my time till four o'clock to the joys of the chase, by which hour, if luck favoured me, I hoped to have bagged an eland; in any case, I would have to wend my steps campward by that time, as I should probably have three or four hours of walking in front of me.

My cherished hopes were, however, doomed to disappointment, for although we searched all the most likely places, not a sign of the beasts could we discover. There were, it was true, a good many old tracks, but that was poor

consolation. It seemed that I was out of luck just now; first there was my disappointment about the elephant in Wasulu, and now the evasive eland was having a laugh at my expense. Cheering myself up with the thought that there must be a good time in store for me in the near future, at four o'clock I directed my shikari to show me the homeward path. It was dark by the time we got out of the bush on to the track, and I was not sorry at last to see the cheerful glow of a fire in the distance which indicated the position of my hut. I had been on my legs for a good many hours that day, and that, with the natural feeling of disappointment, made me feel really tired. A hot bath, dinner and a pipe by the fireside made me feel a new man again. It was my invariable custom to have a fire of logs at night. This was useful more especially to keep off the mosquitoes, which are always most assiduous in their onslaughts after sunset.

Sand-flies, too, were bad in many places, and the ordinary mosquito-net was of no use against these tiny, venomous creatures. The meshes, close enough to protect you from the attacks of the "anopheles," were by no means impermeable to the minute sand-fly. Fortunately for me, I had previous experience of these wicked insects, and had prepared myself with a net of close meshes to guard me against their unwelcome attentions. To travellers in the bush I would always recommend a net with fine meshes, for sand-flies are not uncommon in any part of West Africa. The chief drawback is that one naturally feels hotter in this pattern of net, but to my mind this is infinitely preferable to being tortured by sand-flies all night, thereby making sleep a physical impossibility.

On my arrival I was told by Mamadu that the chief had refused to provide "chop" for the carriers, saying he had none in the place. I at once sent for the old man to ask for some explanation, as I was well aware that rice or

millet was fairly abundant at this time of year, and my party was a small one to cater for.

After a good deal of palaver and threats on my part of reporting him to the Commissioner at Siguiri, in which district I was now travelling, he was reduced to a more sensible frame of mind, and hurried off to carry out my orders with considerable alacrity. This was the first occasion on which I had had any trouble about rationing my followers.

The French have an excellent custom in Guinea, and one which I had previously never found to fail me. When a white man arrives in a village it is the duty of the chief or headman, without any order from the traveller, to at once provide and cook sufficient food for the whole party of carriers and "boys." The ration is about one and a half pounds of rice or millet per head. The meal is brought to the European for inspection about sundown, and payment is then made at the tariff rates. In some places the headman or chief will bring presents of fowls, or perhaps some eggs. When the native is a rich man he will often even produce a sheep or cow. These presents, of course, cannot be accepted without payment, or a return present in kind of about equal value. Some people give a return present of much greater value in money or kind, but this system seems to me to be a bad one, as it encourages these natives to make a sort of trade, most profitable to themselves, in so-called "presents."

The French deprecate the habit of paying more than the actual value to the individual concerned. I have frequently found this custom of "presents" such a nuisance that I now inform the chief on my arrival in a town of exactly what I require in the way of food, at the same time telling him that "presents" are not wanted. There is no doubt that this saves a good deal of annoyance and unnecessary expense. It would, for instance, be most incon-

venient and rather expensive to be "dashed" a bullock, when one's following only consisted of eight persons, and to have to expend four or five pounds in payment therefor. To encumber oneself with a live bullock until one had a chance to dispose of it would be an impossibility, and the only alternative is to slaughter it at once. It will be realized that this sort of entertainment, if repeated three or four times, would soon lead to bankruptcy! I recollect seeing a curious and amusing kind of "dash" made on one occasion.

A friend of mine, who was a distinguished official, had been to a country which had only lately come under control of the Government, and in which the natives were unaccustomed to the usual method of showing their appreciation of a white man's visit. They evidently thought that this was a moment when a great effort must be made to display their generosity. A solemn cortège arrived, headed by the chief, with the "dash." I shall never forget the horror-stricken look on my friend's face when, with due ceremony, a young girl was produced and handed over to him. As the official in question was a particularly shy and modest man, the full humour of the situation will be thoroughly appreciated.

The following day the country began to take on a more populated appearance. Large expanses of land planted with crops of millet and cassada were to be seen, while villages became more frequent and natives passed us from time to time on the road. About eight o'clock in the morning we arrived at the top of a big hill, upon the summit of which there was perched a small hamlet. The headman brought out a calabash of delicious fresh milk, rich and frothy, just drawn from the cow. I gladly took a cup of the refreshing beverage while we were waiting for the last carriers to come in. These people were Jomongonas, a section of the widely distributed Malinké tribe. They

are purely agriculturists, as was indeed evidenced by the wide farms of waving crops through which we had passed.

The view from the top of this hill was magnificent. We were now well down the western slope of the Sankarani-Fie watershed, and from here I got my first glimpse of the latter river. To the north there ran a mass of isolated peaks, like a series of broken links in the chain of hills along which we had been marching for the last two days. The reddish-brown hue of the laterite rocks of which they were formed made a pleasing contrast to the golden fields of ripe millet scattered chequerwise over their steep sides. Far away in the south could be seen the River Fie, a tiny shimmering streak of water, gradually widening, as it flowed westward to join the Niger, into an imposing expanse. The valley through which it flowed was a wide, fruitful plain, where cassada and millet crops jostled against each other, and in the centre of which could be discerned a thin line of rich, dark green foliage, marking the course of the winding stream.

Overhead was a bright, azure sky with the golden rays of the morning sun shining upon the smiling landscape. We rested that night at the town of Jilingé, the biggest place I had yet seen in the bush-country of Guinea, and the centre of the millet-growing district. Jilingé consists of three large villages, each of which on a rough estimate must contain 2000 inhabitants. The central village is the principal one, and it is here the chief of the Jomongonas resides. I was lodged in a palatial hut, with two imposing, carved wooden doors, and what was more to the purpose, they were doors through which one could enter without fear of knocking one's head. Most West African huts have one point in common, that the doors are built so low that it is necessary for the shortest person who wishes to enter to double him or herself up in a most undignified fashion if a severe blow on the head is to be avoided.

My house was also roomy and airy in comparison to the average edifice it had been my fate to live in, so I began to feel myself in luxury. My feelings of comfort and rest were, however, soon to be crushed. Mamadu arrived at the door with a long face, which I felt sure meant some catastrophe of a serious nature. His news was that the carriers had all bolted. This was really too annoying just when I thought I had got matters satisfactorily arranged till we should reach the Niger. I suppose the sight of such a metropolis, as Jilingé must appear to them, had produced this demoralizing effect. I summoned the chief for a palaver on the carrier question, with imprecations on my lips against the faithless fugitives. The chief was amiability itself, and promised me as many men as I should want for the following day; but there was one small matter on which we could not agree. He said the carriers should take my loads as far as the next village, where I could procure fresh men, who would carry for me to the succeeding village, and so on.

As the country was now getting thickly populated, it appeared that I would have to change my porters every two miles or so, in other words, ten times before reaching the Niger! It is hardly to be wondered at that I vowed I would never do this, even if I had to take the chief with me to ensure my carriers remaining faithful. He intimated that this was the custom of the country, and had so been from time immemorial. I politely replied that I was the last person in the world to wish to break old customs (this custom did seem such a probable one!), but that it was also a custom for chiefs to supply white men with carriers when necessary, and for as long as they might be required in a particular "cercle," as the French call their districts. It was not till I had tried every conceivable argument, and had at last to resort to the old threat of reporting him to the Commissioner, that he finally

A Senafou Native from the Neighbourhood of Wagadugu

Two deep gashes from the eye to the mouth are the tribal marks of these people. The particular tribe of a native in West Africa can in many cases be determined by the size and position of the cuts, or tribal marks, on his face.

M. Louis Novella at Sarafinian

M. Novella was in charge of the customs post of Sarafinian, situated in the plain below the eastern slopes of the Tembikunda Range, which separates our British Protectorate of Sierra Leone from French Guinea. I have to thank him for his hospitality during my short stay at his post.

promised his men should go as far as I desired. True it is that by this time I was aware the chiefs had not much influence over their people, and the promise he had given might be broken through no fault of his ; still, it would have been impossible to get the fellows even to start without him, so I had to hope for the best while fearing the worst.

On leaving Jilingé we passed several small streams, flowing towards the Fie, in which natives were to be seen washing gold. The metal is found in small quantities about the Fie River, and this is noticeable, as many women wear gold ornaments in this region. Every village has a native goldsmith, who fashions rough trinkets, such as earrings, bracelets, etc., for the adornment of the local beauties. The gold in this part is entirely alluvial, according to native information. I should imagine even this is only found in very small quantities. The gold mines are on the other side of the Niger in the direction of Buré, some fifty miles north-west of the town of Siguiri. I did not visit Siguiri myself, but I understand that there are several European companies there who are interested in gold. British and German are said to predominate, but at present business is not very bright in the mines.

We marched for some miles up the Fie valley before striking the right bank of the stream.

This was the last river of any size to be crossed before meeting the Niger. Here I noticed a peculiar thing connected with native superstition, and one I had likewise remarked at the crossing of the Sankarani. The Fie was the natural geographical boundary of the Jomongona tribe. A belief existed among the people that any man who should cross this " Rubicon " would bring misfortune to his family. It seems curious that a tribe should be afraid of passing the boundary into the next country, when the two tribes were at peace, but so it was. On account of this superstition the Jomongonas have not

spread westward, nor have they had any intercourse with the people over their border. Intermarriage between the two races seemed to be unknown. I was unaware that this strange belief existed until I reached the river and noticed the hesitation of my carriers to cross it.

My difficulties now appeared to be on the verge of recommencing. What was the use of chiefs who promised by all they held sacred to ensure the loyalty of the porters, when there remained strong superstitions of this kind to be overcome? Having placed their loads on the ground they stoutly refused to move a yard farther. My situation was comical if it had not been so tragic. Here was I, with my worldly possessions, stuck on the bank of this river in the middle of the bush, while my carriers refused to advance a step and might at any moment run away, leaving us in the lurch without any prospect of replacing them. I tried in turn gentle persuasion and threats of chastisement. The former had the effect such methods generally produce on natives of making them think I was "soft," while the latter had the equally disastrous effect of making them so frightened that, if I had not stopped the ringleaders myself, they would have all run away. There seemed to be only one way out of the predicament. I called Mamadu, telling him to make all haste and return to the chief of Jilingé with a message from me that he must come to the Fie at once and palaver. The carriers were informed of my intentions, and told to remain till his arrival. Mamadu went off, and I took up a position on the bank above the men, where I could watch any attempt at desertion, at the same time taking the precaution to place my rifle by my side—an act of which they realized the significance.

I had now to possess my soul in patience, for Mamadu and the chief could not possibly arrive for a couple of hours, it being quite three miles to the town. The porters did not give any trouble, but sat silently and sullenly below

me. Never had two hours seemed so long! Eventually, to my joy, I espied my servant, heading a small procession, moving across the plain towards me. The chief and his followers seated themselves around me, and, to cut a long story short, after a long discussion, in which he was made to understand that if he did not compel his men to cross with my loads, he would be made to come with me to the nearest Commissioner, he did what I required.

When the last load had been despatched to the other bank I let him depart, made happy with a present of a small packet of tea and sugar, and vowing that the carriers would give me no further cause for annoyance. On this point I had my doubts, but told him I sincerely hoped for his sake that they would not, as I should certainly report the whole occurrence to the Commissioner.

These vexatious delays had caused me to lose many precious hours, and I now pushed on as rapidly as possible to the Niger, which we reached on the 17th of February, at a place called Balandougou-Somno-Bara, not far from the large village of Nafadié. For the time being, at any rate, I had no more carrier troubles, and was quite as glad as they were to see the big river once more.

At this village with the very long name there is a canoe ferry. The river was about 300 yards wide at this point, but divided into two streams of equal width by a long, narrow sandbank. While watching my loads being transported I noticed a river barge, under full sail, going upstream towards Bamako. It was the property of a French trading firm, the name of which was inscribed in large letters on the sails. These barges are made of wood, and will carry two or three tons of merchandise. The usual period of transit from Kouroussa or Kankan to Bamako occupies seven days. During the rainy season, when there is plenty of water, barges of twenty-five tons burden can navigate this portion of the stream.

I calculated I must be about 100 miles south of Bamako, and determined to push on that night to Tombola, on the other bank, which was on the main Siguiri-Bamako road.

While the transport operations were going on Mamadu, whose duty it was to see the loads safely shipped, disappeared. On looking up the river I observed him in the distance, stealthily approaching a group of waterfowl of all sizes and descriptions, which were sunning themselves on he sandy bank of the stream. The ground was as flat as at pancake, without any sort of cover, and it was obvious that his painful endeavours to advance unperceived were doomed to failure. Sure enough, the birds soon rose in a cloud, flying off out of sight round a bend of the river. Mamadu went forward, however, to the spot where they had been, where he stooped to pick up something. I took no further notice of his movements, until I heard his familiar voice close by. He then appeared, staggering under the weight of a big fish, which must have weighed at least twenty pounds, and had the look of an Indian mahseer. The fish was beginning to rot, and had such an unpleasant smell that I bade him remove it at once. This he did with a look of reproach, as much as to say that this was an ungrateful way of showing my appreciation of his labours.

For the benefit of the uninitiated I may state that the native prefers rotten fish to the fresh article, probably and justly thinking there is more flavour about it. Mamadu's version of his adventure was highly amusing. He said that seeing a bird near the water, which was "très bon manger," he had intended to try to catch it with a small fishing-net which he had found close by. His idea was to approach within a few yards and then lasso it! Several of the birds were pelicans, and had evidently been discussing their morning meal when he frightened them and they flew off, dropping the dainty morsel.

The people here are mostly fishermen. They catch many kinds of fish in the Niger, some of which have an excellent flavour. The best fish I ever tasted was the "capitaine"; it runs up to ten or twelve pounds weight frequently, and is beautifully firm. Many of the Niger fish are difficult to eat on account of the numerous bones they contain, but this variety has few bones. Electric mud fish are fairly common when the river is low. They are flat, reminding one of dabs, and if you touch them you experience a decided electric shock. These fish make a peculiar "clucking" sort of noise, by which they can often be easily located. The native fisherman catches his fish with nets, or more frequently in traps. In some parts they even spear fish, but it is unusual on this portion of the Niger.

It is a usual sight in the early morning to see the father of the family, accompanied by his son, often quite a small urchin, setting out from his village in a dug-out canoe for the fishing-ground. He then casts his net into the water, dragging it while the little chap sits in the stern and cleverly manipulates the paddle. These fisherfolk are brought up, almost from the cradle, to paddle a canoe; it is wonderful with what energy and endurance the youngsters will propel the craft. On the Niger it is unusual to see the women paddling, but in other West African rivers this is a common sight.

The fish-traps are generally made of reed-canes, in the shape of a cone, with the base open and the apex tightly closed. A series of these are placed in some suitable spot, such as a backwater, the bases being turned up-stream. There are several devices for keeping the fish in once they have entered the base of the cone, but the principle is that of a trap door which closes on the victim as soon as it has entered.

CHAPTER IX

Kob—A West African road—Characteristics of the Moors—The influence of Islam—The French Soudan—Kangaba—Hospitality—A picturesque market—Vexatious delays—African punctuality—A new acquaintance—Uncomfortable marching—Shea-butter—Its uses—A native tooth-brush—Arrival at Bamako.

OUR route to Tombola lay across a marshy, open stretch of land for some miles. The marsh was dried up in many places, and a rank, coarse grass grew over it to a height of seven or eight feet. This place was the haunt of herds of kob. The natives evidently were not hunters, for these animals could be seen within half a mile of a village ; in fact, one I shot was close to a village. The kob is a beautiful creature, and the herds we saw made a pretty picture as they streamed away in the distance with their easy, graceful strides which cover the ground so rapidly. Once or twice we disturbed a whole family party, who, unaware of our approach as we came up against the wind, suddenly emerged from amidst the waving grass, not more than a hundred yards away, throwing up their beautiful heads to stare at us for an instant and then scampering off in alarm to a safer distance. With that curiosity so fatal to the antelope, they would halt after galloping a short way and turn broadside on to have another stare at the intruders of their domains. This was the moment for the sportsman to take his shot, and it was at such an occasion that I bagged my beast.

The country now assumed a more wooded aspect. Trees of the nature of an African oak were dotted here and there

over the grassy surface of the ground, while small rivulets, with steep banks and deep pools in their rocky beds, were the happy playgrounds of merry parties of hippopotami, who disported themselves in full enjoyment of the bright scorching rays of the sun. These rivulets were tributaries or backwaters of the Niger, breaking up the otherwise even surface of the land. After halting at one of these streams for the thirsty carriers to drink, we espied close by the big road which we must follow to Bamako. The road is a mere sandy track, thirty or forty feet wide, worn, by the feet of hundreds of passers-by and herds of cattle, into a passably level route. Level, that is to say, for a West African road, but not at all suitable for a two-wheeled cart, as its evenness is broken by frequent ruts, probably made by the rains. But this road is a trade route of some importance, leading as it does from the metropolis of the French Soudan to the heart of French Guinea, and passing through the large markets dotted about the left bank of the Upper Niger.

We constantly met large herds of cattle, usually owned by Moors, as the French indiscriminately call the inhabitants of the vast territory north of the Senegal River, which reaches up to the confines of Morocco, in Northern Africa. These people are great traders, but dishonest, often lazy, and the most unblushing liars in the world, I should imagine. They are also very dirty in their person and their habits. The Moors, however, possess some excellent qualities, for they are extremely intelligent and most enduring on the march. Their knowledge of cattle-tending must be great, as these beasts are brought hundreds of miles from the interior of Mauretania to the markets of Guinea without any appreciable loss of animals. The Moor is a cunning trader, who makes large profits out of his transactions with the more simple-minded Malinké. Their faces are pale, dirty whitish yellow, their features

are aquiline, while their noses have a distinctly Jewish, hooky appearance.

The Moor has bright, piercing black eyes, which are a sufficient testimony of his shrewd nature. On the march the cowherd travels on foot with his beasts, driving the huge droves in front of him with many weird cries and much thwacking with a stout stick, stopping every now and then to chase a truant out of the bush whither he has wandered to enjoy a succulent mouthful of grass, at the same time heaping imprecations on the luckless animal's head. They travel slowly, and will probably cover only ten miles in one day. It is by no means unusual for a caravan of cattle to take three months over its journey. The master does not accompany his animals. He is far too superior a person. He is the proud possessor of a horse, and follows his cowherds at leisure. On arriving at my halting-place in the evening, about five o'clock, I have frequently seen this individual just mounting his steed in order to follow the herds we had passed that day. Riding his mount he will cover the distance to their halting-place in a couple of hours, and sleep there that night. The cattle are fine, big animals, and are the humped variety. They have huge, branching horns, stout bodies and short, strong legs. The cows have small udders, and give but little milk in comparison to an English milch cow of their size.

Besides cattle the Moors bring large quantities of rancid butter and curdled milk to the French Soudan, where these find a ready market. The butter, which is carried in leather bags called "guerba," is specially appreciated by the natives, who do not appear in the very least to be disconcerted by the unpleasant smell thereof. The Moors speak a harsh, guttural language containing a good many Arabic words. Their knowledge of the native languages is small, hardly extending beyond an acquaintance with

NATIVES POUNDING RICE AT TOMBOLA

This village, which is in the south of the Upper Senegal and Niger Colony, is in the rice-growing country of that region. Rice is the staple native food, and it is a familiar scene to watch it being pounded in a large wooden mortar by means of a heavy wooden pestle. This work is usually performed by the women or small boys.

sufficient market expressions to enable them to drive a good bargain. When they arrive at a village they herd together in their own quarter of the place, mingling little with the West African natives, whom they despise with a contempt they take no pains to conceal.

It is a sound principle to avoid camping in the neighbourhood of Moors, on account of their thieving propensities ; indeed, with their long, unkempt hair and wild, fierce faces they have such an unprepossessing appearance that one naturally shuns coming into close contact with such rascally-looking people.

It was noticeable as we advanced that we were getting into a land more under the influence of Islam than heretofore. In every village was a place set aside for the mosque. This consisted simply of a few rough logs, laid on the ground in the form of a hollow square, with a break at one side for the doorway. At sunset the " muezzin " could be heard calling the faithful to prayer, and a large proportion of the villagers would obey the summons. Mohammedanism is undoubtedly making great strides in this part of Africa, but as yet the Mussulmans are far from being devout followers of the teachings of the Prophet. Drinking, for instance, is far from unusual, but the religion has certainly had a beneficial influence on these people in more ways than one, and they are decidedly all morally better for their conversion from paganism.

After leaving Tombola we marched for two days through a sandy country, where the vegetation was more stunted and water more scarce. Although within three or four miles of the left bank of the Niger, running water is scarce near the villages on the roadside. Most of them dig wells, for water is found close to the surface of the ground, and this is preferable to sending daily to the river for their supply. In the rainy season there is not this difficulty about water, as the whole country is low-lying and would

be inundated by the river. The lesser bustard I saw and shot frequently in this region, where the flat, grassy plains are a favourable haunt of this bird.

All this bank of the Niger is much inhabited by the cobus kob ; every morning early I used to see large herds grazing in the distance near the river. Stalking here was a difficult matter as the country was so open. Except for an occasional oribi there seemed to be no other variety of antelope in our vicinity. Bushfowl and guinea-fowl were very plentiful, and it was never necessary to resort to the tough, skinny fowl which so often forms the staple article of diet for the white traveller in West Africa. My luxuries, such as whisky and sugar, had by this time run out, but thanks to a good supply of flour, the faithful Mamadu was always able to bake me plenty of bread. With that and an abundant supply of fresh meat and milk I fared none too badly for the bush.

On the 19th of February we reached the large, important village of Kangaba, called sometimes Kaba. This was the first place of any size in the French Soudan, although the actual boundary between it and French Guinea was close to the spot where I had crossed the Niger.

I have several times used the expression " French Soudan," and feel it perhaps requires some explanation. It is a name the French have given, in a very broad sense, to the whole of that vast territory which comes into their sphere of influence from Lake Chad to the Senegal River, and bounded on the south by the coast colonies of Guinea, Ivory Coast and Dahomey, while the northern limit is the Sahara Desert. The western portion of this country is officially known as the " Upper Senegal and Niger Colony," and this extends from Niafounké on the Niger, south-west of Timbuctu, to the Senegal River on the west.

The colony is divided up into a number of administrative districts, and, of course, covering as it does such a large

area, the races who inhabit it are of many different types and shades. Kangaba is a walled town with a population of 2000 inhabitants. The walls, which were built in the time of the Sofa wars, are now crumbling to pieces as they are not kept in repair. They are built of red clay, which is found in quantities in these parts. The walls are still in some places twenty feet high and five to six feet thick. There are four gateways, one at each main point of the compass. The wall has been constructed out of the clay excavated from a big ditch running round the town. The ditch is now filled in in many places. Kaba stands on the southern slope of a hill, commanding a fine view of the Niger valley towards Bamako. The other sides of this hill and the plain leading down to the river on the east are covered with farms of Guinea corn, rice and millet. Kangaba is divided into three villages. The main one is the market for all the trade following the Bamako-Siguiri road. Between it and the Niger there are two other smaller villages. The nearest of these is the farming village, in which live many of the cultivators of the local crops. The third village is almost on the Niger banks, at least three miles from the market, and here the fisher-folk live.

I had great hope of being able to pick up a passing trading barge here which would give me a lift to Bamako. But at the time there was unfortunately none on the river.

My " boy " was very sore-footed and doleful when we reached Kaba, informing me that he could not walk any farther without a rest. He really was going rather lame, but was suffering more from want of pluck than fatigue, I fancy. It had certainly been very hot on the march, particularly during the past few days ; also we had marched continually since leaving Falama, and some of the days had been long ones. However, I decided to make one day's halt to let him rest, and at the same time to arrange

for fresh carriers. Mamadu came to ask me for an advance of pay, going off in great jubilation to the market to spend on fineries the ten francs I gave him. He was no exception to the ordinary West African native, who is inordinately vain and lavishes all his money on dress.

The chief of the town was full of protestations of hospitality, and nothing would satisfy him but that I should live in his house. He and his family turned out, going to a hut near by. The old man was evidently of a kindly disposition, for I soon discovered to my cost that his hut was a right-of-way for all kinds of domestic animals. In the early morning I would be awaked by the lowing of a cow as she casually sauntered through my bedroom on her way to the pastures outside the village. The same animal paid me a visit one night while I was having a bath after my evening's shoot. On that occasion she seemed in no hurry to go away, appearing fully to realize the advantage of her position while I was bathing ! My cries, intended to frighten her, were treated with silent contempt. When I flicked handfuls of water at her she merely started to lick that portion of her anatomy which had suffered a wetting. Finally, I had to call my " boy " to drive out the offending beast. When the chief was given orders to prevent a recurrence of the annoyance, he gently replied that he was sure the " missi " (Malinké word for " cow ") meant no harm. Besides the cow, numerous pigs, goats and fowls used to make my room a daily promenade. The only way out of the trouble was to blockade the doors. I finally chartered two small boys whose duty it was to sit, one at either doorway, and drive away any offender which attempted to force an entrance.

At night the market was a picturesque scene. Innumerable tiny stalls, each lit up by a small native lamp or flare burning ground-nut oil, were dotted about. At each sat a woman, disposing of her wares. The articles

THE SPREAD OF ISLAM IN THE WESTERN SOUDAN

A Malinké chief and his followers in their Mohammedan robes illustrate the influence the religion of "the Prophet" has gained of recent years in these regions; for this dress is the hall-mark of the Mussulman in West Africa. A wave of Mohammedanism has swept rapidly and steadily westward from Egypt across some three thousand miles of the African continent during the last century. Apart from the consternation this causes in the hearts of those who are endeavouring to establish Christianity in the Dark Continent, serious thinkers are not lacking who view with alarm the possibilities of an African "holy war" in the future.

for sale included fish, different kinds of native diet and fruit. But more interesting to the European were the vendors of such articles as grass mats, country cloths, gold ornaments made by the local smith out of Siguiri gold, also balls of rubber and bars of native salt. While the women mostly sat quietly selling, the men wandered about in groups of two and three, chattering and smiling as they strolled along, giving to the whole scene more the aspect of a promenade taken for amusement than for the sake of buying anything. Occasionally, however, one of these tall figures, clothed in a white Mohammedan gown, would stop in front of a stall and ask the price of some object he fancied. This usually was the preliminary to a great deal of haggling, and in the end the article was probably sold for about half the price originally asked.

Bargaining is a feature of all transactions among natives, and necessarily so, for the seller goes on the principle of asking about double the value of his wares in the hopes that he will get it, and secure in the knowledge that he can, if required, reduce the amount by one half and yet not lose.

On the 21st I started off once more, hoping that this time, as we were out of the wildest bush, I should have no further trouble with carriers. Things in this particular respect were, to my disgust, worse than before. Along the high road to Bamako villages were now strewed at close intervals. Having gaily started off with eight picked porters of sturdy build, I was congratulating myself that they would take my loads along at a fine pace to Bamako, and I need no further worry myself about them. Misfortune visited me at the first village, however, where my servant came to report that the carriers wanted to be paid and changed! We had not walked more than four miles, so it was rather trying to my temper to hear this piece of news.

Haranguing was of not the slightest use, and one and all proceeded to slope away into some friendly hut or other convenient place of refuge. I summoned the chief and made him send for a fresh gang at once. After infinite delay I got started on the road once more, but did not reach my halting-place till late that night, after many similar vexatious delays *en route*. The numerous villages on the way made the task of keeping the carriers faithful doubly hard, they appearing to think that their duty was only to carry from their township to the next one. After this experience I decided to abandon the attempt of keeping my porters even for one day, since no promises of high pay nor any amount of argument seemed to produce an effect. I now arranged with the chief, or headman, of the village where I spent the night to supply carriers to the next village only ; at the same time he was told to warn the headman of that village that I would require fresh men ready at the hour of my arrival the following day. The latter in his turn was ordered to inform the succeeding village of my requirements, and thus I laid a " dak " of porters for the whole of the morrow's march. This plan, although not an ideal one, I found worked better than the previous arrangement, and I adhered to it for the rest of the journey. The chief drawback to it was the loss of time involved.

If I ordered my new carriers to be ready at a certain village at a certain hour, the chief of the place, with the native's delightful disregard of punctuality, would frequently not think of sending for his gang until I hove in sight. Time is no object to the negro, and he can never understand why it is a matter of any importance to the white man. Of course, these people have no watches, and their only way of illustrating time is to point to the position the sun will approximately occupy in the sky at that hour. Even that is not generally reliable within

less than three hours. Often when marching to an unknown spot have I asked my guide where the sun will be in the heavens when we arrive, and he has buoyed up my hopes of an early arrival by indicating three o'clock, whereas we have not arrived till about six in the evening.

That night, on entering the halting-place, I noticed a white man standing in the market. He was a French trader who had just arrived, like myself, but from the opposite side of the Niger, where he had been to buy rubber for his firm. I asked him to give me the pleasure of his company at dinner, when we would celebrate the meeting of two white men in the bush. The last European I had seen was at Kankan, a comparatively short time ago, but this trader had been in the wilds for six months without a sight of a white face, he informed me. We had a very pleasant evening together, and I produced the only kind of alcohol that remained for the festivity. It was a small bottle of rum, a part of my medicine stores, and we drank to the *entente cordiale* in a glass of that!

My new acquaintance gave me some interesting information about the trade of the country. He said the rubber trade did not now pay as well as it used to do, for the natives were no longer content with a few beads or looking-glasses in exchange for their produce as had been the case a few years, or even months, ago. They now would only take cash, and demanded a far higher value for the rubber. We conversed on many topics of mutual interest and it was with regret that I bade him good-bye when he got up to leave.

Owing to the open nature of the country the marches were hotter even than before. In the middle of the day, when halting for a meal and a rest, one was plagued by myriads of small midges. These little insects are not to be seen when you are on the march, but as soon as you make a halt in the shade they spring up, from goodness knows

where, in an incredibly short time, buzzing round your face in a most distracting fashion. They do not bite, but have a nasty habit of getting into your eyes, down your ears, and in your mouth and nose if you give them half a chance. I don't think I have ever been so worried by flies as I was here. Flicking with a handkerchief only seems to increase the fury of their onslaughts without visibly diminishing the number of your tormentors. The only remedy is to abandon the shade you had been so thankful to seek, and, if rest you must, sit in the sun as far from shady trees as possible. After about 4 p.m. these miniature demons seem to disappear, no doubt exhausted with their ceaseless activity of the daytime, and seeking a much-needed rest.

Two trees must be mentioned which grow in profusion here; one is the "shea-butter," and the other the "African oak" (mentioned above). The former, called in Mandingo or Malinké "shi," and known to the French as the "carité," grows about the size of an ordinary apple tree. The leaves are a refreshing emerald-green, and its graceful spreading branches and silver-grey trunk make it one of the most picturesque flora of the landscape. The fruit ripens about September or October. It is then picked and buried in the earth, where it is allowed to remain till it rots. It is then crushed with stones, and the oil which is expressed by this process is boiled. The resulting substance is what is commercially called "shea-butter." It has in this form a greyish-white colour, and is made up into balls or small blocks for convenience of transport.

Shea-butter has several uses. It is first and foremost used by the natives as a cooking ingredient. The native is extremely found of oily dishes, consequently shea-butter takes a prominent part in all his culinary recipes. The odour of the butter, when cooking, is quite one of the most unpleasant it has been my misfortune to meet with in Africa. To my mind it is so disgusting that I can think of

nothing in England with which to compare it, and I feel convinced that any comparison would be inadequate, only being an insult to the English article! But in spite of its unpleasant smell it is only fair to say that it is invaluable to the native in a country where oil of any description is scarce. The oil is also used for lighting purposes, in the same way as ground-nut oil. Small flares of shea-butter are used for the house or market at night. The method is simple in the extreme. A piece of wood, or a bit of the bark of a tree, is scooped out so as to form a tiny hollow vessel, and the butter is poured into this. Wick is manufactured out of the fibres of a palm, and is steeped in the butter and lighted. This primitive little night-light is very serviceable and does not blow out easily in a wind. Shea-butter is now exported to Europe, where the oil is in some demand for making cart-grease and coarse lubricants. The export trade of the French Soudan in this article is increasing. The trees require practically no attention, growing wild in the bush in certain localities where the soil and climate are favourable.

The other tree mentioned above is called in Mandingo "Mannagézé." It also is very abundant in this part of the Soudan. It has a pretty white flower, with a delicious smell like a magnolia. The tree flowers through a great part of the dry weather. The small twigs of this tree, which grows to a height of thirty or forty feet, are used by the natives for cleaning their teeth. The bark or skin is first peeled off and the teeth are then rubbed with the exposed portion of the wood. It has a bitter taste, not unpleasant, which remains in the mouth for some time after the teeth have been cleaned. In the early morning it is a very ordinary sight to see every carrier chewing one of these sticks as he walks, and when his load is laid on the ground he will start to use it much in the same way as one uses a toothbrush.

Walking along thus, and covering twenty to twenty-five miles a day, we reached Bamako on the 23rd of February. We were now about 400 miles from the source of the river, and since leaving the railway at Pendembu I had walked over 600 miles, almost without a whole day's repose, for when I had halted I had usually been out shooting from early morning till evening, so I was glad of the thoughts of a rest. During the last thirty miles of the march a low range of hills appeared on the west; this was the edge of the Kati Plateau. This plateau stretches for some miles towards the Bafing River, and is a striking feature of the scenery near Bamako, for it dominates the town on this side, while the surrounding country is by contrast very flat and low-lying.

The road gradually approaches the Niger on the east, being intersected by numerous small rivulets flowing in sparkling crystal streams from the Kati Plateau to the big river.

The last ten miles or more are a vast expanse of cultivated land. Rich rice and millet fields stretch as far as the eye can reach in either direction, towards the Niger on one side and to the foot of the plateau on the other. This is the heart of a rice-growing district for the big markets which depend on Bamako for their annual supplies of food. The busy farmers of this region are prosperous and appear happy and contented, as they well may.

We arrived at Bamako a strange-looking party. I was tanned a deep brown colour from long exposure to the fierce sun of the Soudan. My clothes were luckily khaki, or the state of my garments would have been even more noticeable than it actually was. I was much in need of a thorough overhaul and repair! Mamadu was in a far worse plight than his master; his long, white robe and white, baggy trousers were in rags, and certainly looked as if they had been any colour but white even in their

palmiest days. Small wonder that the good people of Bamako were astonished at the strange figures they saw entering the town that afternoon. Crowds of small boys and idlers turned out to watch and follow our small caravan as it wended its way slowly into the big market-place. I am sure we must have looked like some wild men from the woods !

With some difficulty I got someone to show me the road to the Commissioner's bungalow, where I was anxious to report myself before finding a lodging-place.

CHAPTER X

Bamako—The Bambaras—An animated scene—The Kati Plateau—Dinner with the Governor—Government House—Game in the "Bend" of the Niger—The Senegal-Niger Railway—Bamako market—The hotel.

THE first sight of Bamako to the traveller is, indeed, a strange one. After walking through miles upon miles of bush and seeing nothing more imposing than a native village, one suddenly is amazed to behold a fine large town, with wide boulevards and solidly built stone houses, nestling close to the foot of the Kati Escarpment, with the placid waters of the Niger flowing past the east end of the cantonment. Bamako is planned on the lines of a town in France, and when walking down one of the shady avenues I could have imagined myself in a provincial French town on a hot summer's day. Bamako is the capital of the "Upper Senegal and Niger Colony," and the head-quarters of the Lieutenant-Governor and Administration. The European population is a large one. It includes no less than fifteen trading firms, each of which has several French employés. There are a very large number of officials, and several of the staff of the Senegal-Niger Railway. A number of these gentlemen bring their wives to the country.

When I was at Bamako there were about a dozen ladies, who were very excited at the prospect of a fancy-dress ball which was to take place shortly. It was very surprising to find such civilization in the middle of the Western Soudan, and the town is a testimony to the energy of the French administration in West Africa. The houses now

being built have two storeys and fine wide verandahs; water will be laid on to each one and the streets will soon be lighted by electricity. I was directed to the Commissioner's bungalow, a well-built house in the centre of the town. He received me with all the courteous solicitude which the French nation so peculiarly knows how to show to the foreigner. After he had given me all possible assistance and information, I was invited to *déjeuner* the following Saturday and shown the way to the hotel where I was to stay.

Having sent on my kit, I proceeded to the offices of the French Company, the trading firm which had arranged my money affairs for me at Sierra Leone. Here I was introduced to the agent, a most agreeable Frenchman, with whom I had a conversation about the funds which had been deposited with him in my favour. I had calculated the money I required for my journey from Freetown to Bamako to a nicety, and was very glad to be now able to draw a further supply. Here, also, it was necessary to arrange for further drafts to be made payable to me at Timbuctu or some place down the Niger, close to my intended starting-point for the desert. Unfortunately the French Company had no branches open in the Soudan on the route I proposed to follow, and I foresaw difficulties looming ahead if I should be obliged to carry large sums on my person or in my loads. My chief fear was on the score of robbers. Having no escort, and not having too much faith in my servant's honesty, it seemed highly imprudent to carry with me more cash than was absolutely necessary.

However, my friend the agent was most obliging and promised to try to arrange matters for me with another firm which had a house at Timbuctu. It may come as a surprise to some people to hear that French trading firms do actually exist at this point, which, I must acknowledge,

to me had always seemed like a mythical place rather than a reality. But so it was. Two or three enterprising firms had pushed hundreds of miles down the Niger, anxious to be the first to tap the trade of this little-known region.

I had decided after my talk with the Commissioner to take the train from Bamako to Koulikoro, and at that point to embark on the Niger. There were two alternatives open to me, either to charter my own barge, or to take a passage on a Government launch. If there was sufficient water in the river the latter would be the quicker way, and therefore the most advantageous for me. On the other hand, should the river be very low I should do better to sail and pole down-stream in the barge, which draws considerably less water than the launch. I therefore wired to the offices of the Niger Navigation at Koulikoro asking which would be the surest and quickest kind of transport to take. The following day the reply came advising me to take passage on a launch which would leave about the 1st of March.

At Bamako the roads are excellent and horses numerous, so that many people possess a vehicle and drive a good deal. Of course, most of the traps come out from France, but I saw one or two which had been locally made and were first-rate copies of the French model. So far motor-cars have not been introduced, but I have not the least doubt that they will shortly make their appearance in this go-ahead African town. The roads are quite good enough, and I was informed that most of the bridges would require but little strengthening for this purpose. One afternoon I went for a stroll towards the river. On the way I passed through the native town, which is kept in spick-and-span order like the rest of Bamako.

The people are mostly Bambaras, another large offshoot of the Mandingo tribe. Bambaras are an intelligent race, and possibly the most industrious of all the races of the French Soudan. Large numbers are recruited for the

THE RAILWAY STATION AND HOTEL AT BAMAKO

Bamako is certainly the most important place in the French Soudan. Being connected with the Niger and Senegal rivers by rail, it has direct communication with the Atlantic Ocean on the one side, and with the fertile rice-growing areas of the Middle Niger on the other, thus making it a great *entrepôt* of the trade in these regions.

THE NIGER AT BAMAKO

A special interest attaches to the Niger here as far as the traveller from the south is concerned. At Bamako for the first time he can discard that clumsy, however useful, form of transport—the native porter. Thirty-five short miles of railway join Bamako to Koulikoro, and then the Niger is uninterruptedly navigable by stern-wheeler, launch, or canoe for about 900 miles to Ansongo.

French West African troops, as they have a great reputation for pluck and endurance. The same tribe furnishes the best river boatmen, and Bambaras are found plying such varied trades as the shoemaker's and the blacksmith's. They are scattered in more or less big groups all along the Niger from Bamako to Mopti, and large numbers inhabit the countries about Nioro and Sokolo on the left bank of the river, stretching towards the desert. The men and women have fine physique, they are usually tall and thick-set, but rather clumsy in build. The women are very vain about their appearance generally, and their hair in particular. The *coiffure* is decidedly elaborate. There are two fashions in vogue. The hair is drawn up tight from the forehead and built upon the top of the head in a sort of ridge shape ; this curious form is obtained by placing a framework underneath. The second method is to twist the hair into numerous plaits, which are arranged fantastically around the ears and allowed to hang down over the face. Gold ear-rings and silver rings are much worn by the well-to-do classes, while sham pearl necklaces are in great demand as ornaments for these dusky beauties.

The men and women are of a cheerful, light-hearted disposition, and it is seldom that these charming people have not a ready joke and smile on their lips by way of welcome to the stranger. Having passed through the native quarter, I saw in front of me several acres of banana groves, the long graceful leaves blending in the distance with the darker green foliage of orange and lime trees. Besides many kinds of fruit the Government grow quantities of vegetables with which the whole station is supplied ; I was told that there is a never-failing supply from one year's end to the other.

The scene on the banks of the Niger was an interesting one. A ferry was plying from the opposite bank towards

me, in which were a number of passengers hurrying across before nightfall. Here and there, on the broad bosom of the river, were scattered native canoes with their quaint awnings of palm and banana leaves, looking like some big, brown bird floating on the water. The banks of the Niger are low and sandy here, and on the shore were gathered a little knot of spectators from the town, talking and watching the arrival of the ferry, while, as the sun was sinking in a flood of red and gold behind the Kati Hills, those who were devout worshippers of the Prophet sank to their knees and could be heard muttering in low, musical tones the cry "Allahu Akbar." To my mind it is an impressive sight to watch the pious Mohammedan at this hour forsake the occupation upon which he is engaged, prostrating himself with his face turned eastward towards the holy city of Mecca, forgetful for the time of worldly matters, but devoting his thoughts and prayers to his God.

I stood a silent spectator of the peaceful scene until the fiery sun had disappeared behind the distant hills and darkness began to descend with its customary swiftness on the face of the land, blotting out the water and craft from my vision. I must be hurrying back, as I had promised to dine with one of my new friends that night, so I regretfully turned away from the Niger and set my face homewards. That night I had a bad attack of fever, being obliged to leave my host early and retire to a bed, piled with blankets, for the next twenty-four hours. The reaction after my hard marching was probably now telling on me, and I had also a touch of the sun, I fancy. Hot lime drinks and some judicious doses of quinine and phenacetin soon did their work, and, although feeling rather limp, I was myself once more.

In the meantime I had heard from the agent of the French Company that he had been able to arrange for a

draft on Timbuctu for me, so, my business being settled, I was at liberty to pass the rest of my time at Bamako as I pleased.

I had two duties to perform, one was to pay an official call on the Governor, the other being to visit the Colonel and officers of the garrison at Kati.

Having been lent a horse by the Commissioner I decided to ride to Kati, which was on the Kati Plateau, about eight miles off. Before starting, however, I received a wire from the Colonel, asking me to have *déjeuner* with them, so I postponed my departure till a later hour that morning, intending to visit the Governor on my way back to the town in the afternoon. My steed was a flea-bitten grey pony about 14.2 h.h., which had not been out of the stables for some days, so I had an interested audience to watch my departure, as they informed me he was *très méchant!* As we started down the road my mount showed a decided desire to return to stables, commencing operations by shying and then standing up on his hind legs while he executed a kind of war dance. I think the spectators had their money's worth of fun before we finally got under way and set out at a gentle trot for Kati.

The road was a capital one, skirting for a couple of miles along the foot of the hills and then across the railway, gradually climbing the slope by gentle gradients. As we climbed we left the burnt-up, khaki-coloured plain behind and rose into a landscape of green verdure and sparkling streams. Many small torrents came headlong down the hill-side, their rocky beds giving birth to iridescent cascades, around which hovered beautiful, many-coloured butterflies. Up and up we climbed until the summit was reached, and I drew rein to admire the view spread out before my eyes. The well-watered green slopes of the hills stretched away to the north and west as far as one could see; below me I could just catch a glimpse of the

railway—the metal rails looking like a gleaming snake as they twisted about following the contours of the hill. To my right I beheld some whitewashed buildings glistening in the sun, evidently the cantonments of the Kati garrison.

The horse-boy now arrived, panting and breathless from the climb, so after waiting a moment to give him time to recover, I made my way slowly towards the houses. On my arrival I had to apologize for the shortcomings of my wardrobe, for, of course, I had not been able to bring any uniform on my expedition, and my hosts were all attired in smart, white tunics in honour of the advent of a British officer. The Colonel was a fine-looking, stalwart soldier, who had a splendid record of service in West Africa, and was wearing the cross of the Legion of Honour. That luncheon-party was the merriest one I had attended for a long time, and, after many weeks of my own society since leaving Freetown, it was very enjoyable to be among such cheery companions. The officers at Kati can get by train to Bamako nearly every day if they wish, but their duties keep them fairly busy in garrison, they informed me. They have a pleasant little colony at their station and the joys of social life at Bamako did not apparently appeal to them greatly. As a matter of fact, the Europeans at the capital of the Soudan are divided rather strangely into three groups. The traders and the administrative officials of the district of Bamako are all quartered in the town, and, as has been explained, the troops and military officers are at Kati, while the administrative officials of the colony are at a place called Koulouba, which is on a hill three miles from the town. The officers were most anxious for me to spend the afternoon with them, but it was half-past three before we finished the sumptuous repast which had been prepared for us, and I had an eight-mile ride to Government House at Koulouba in front of me.

The Lieutenant-Governor of the colony had been away

touring and only returned the previous day, so I was fortunate in being able to make his acquaintance before leaving Bamako. Government House is a splendid stone mansion, situated on the edge of the plateau, overlooking the town of Bamako and commanding a fine view over the Niger, which can be seen like a silver thread winding its way north-east towards Kouli-Koro.

The Lieutenant-Governor's residence is truly a palace. It is three storeys high, and has large rooms and cool, wide verandahs and corridors. The house is furnished in the most comfortable, if not luxurious, style, and I had no difficulty in believing the statement that it was the finest house in French West Africa. I have seen no building in British West Africa which could in any way be compared to it. It is said to have cost a million francs to build, as all the material had to be brought from Europe. Electric light and hot water are laid on everywhere, and no effort seems to have been spared to make the place a model of comfort and elegance.

The houses of the officials who are on the Lieutenant-Governor's staff are also admirably fitted up. Water is a great difficulty on the top of the hill, but this has been overcome by installing an apparatus for pumping it up from the Niger below.

A capital carriage-road leads down the hill to Bamako, and there is also an excellent bridle-path. The Lieutenant-Governor had his wife and family at Koulouba. I was told that they proposed to spend a whole year in the country, as they found life so agreeable and comfortable at Government House.

The Lieutenant-Governor received me very graciously, supplying me with all the maps and information I required. He also promised to telegraph down the Niger, sending instructions for every facility to be given me where I wanted to shoot. In the course of conversation I was

rather astonished when he inquired after my two companions. I informed him that I was travelling alone and had no companions, whereupon he showed me a letter referring to the projected visit of three Englishmen to Bamako, who were engaged on a scientific and hunting expedition in the Western Soudan. He naturally thought that I was one of this party. I had, however, never heard of them. It was certainly a strange coincidence that another party of Englishmen should be contemplating a trip in this region about the same time as myself, more especially as Englishmen very rarely visit the country. I never met this party, and am not aware if they ever started on their proposed tour.

At Government House I was introduced to one of the secretaries, who, I was told, had served in the "Bend" of the Niger, where I wished to shoot, and would be able to give me information on the subject of the game in that locality. I was delighted at the opportunity of getting some reliable, first-hand news. The gentleman I was introduced to had been in the heart of the country I intended to visit for five years, he informed me, and was a keen sportsman, so I was in great luck to meet him here. He advised me to disembark at a place called Niafounké, nearly 500 miles down-river, and from there to strike into the district of Bandiagara, where big game of many varieties was plentiful. He also gave me letters of introduction to the French officials of the districts through which I should pass, and informed me of the best hunters to be obtained at the villages in the region to which I was proceeding. His information was most valuable, and I was overjoyed to hear his glowing accounts of the shooting available in the "Boucle," as the French call the Big "Bend" of the Niger. He, like most Frenchmen who shoot in West Africa, had used nothing but the Lebel rifle, which has a calibre but little bigger than the ·303. I

cannot help thinking that a great deal of game must be wounded when such a small-bore rifle is relied upon for the bigger animals, and, quite apart from the danger to the individual who is shooting, to my mind it is cruel to wound a beast which you are unable to overtake and kill owing to the rifle being a less powerful weapon than should be used.

My new friend invited me to his quarters, where we had a long and interesting conversation about shooting in West Africa. Later in the evening we descended the hill together to Bamako, whither he was riding. We made an appointment for the following day in order to continue our conversation, but unfortunately it fell through.

The Senegal-Niger Railway forms one of the links forged by the French for penetrating into the Western Soudan from the coast. The River Senegal is the first link in the chain. From the port of St. Louis, on the Atlantic coast and at the mouth of the Senegal River, this waterway is navigable at certain times of the year for big steamers as far as the town of Kayes. This town is situated about 400 miles up the stream. Above Kayes the Senegal River is not navigable, and until Koulikoro is reached the Niger is not navigable, although from that point downwards the river is navigable for many hundred miles. Now to connect these two waterways, the Senegal and the Niger, it became necessary to join the towns of Kayes and Koulikoro by a railway. The French thus completed a line of communication from St. Louis on the sea-coast to the heart of the Western Soudan.

Although the Senegal River is navigable as far as Kayes, this is only the case during certain months of the year. For instance, during the rainy season, from about July to November, ships of 2000 tons can ascend to this point. Small steamers, launches and stern-wheelers can proceed to Kayes until the month of February, but from February till June the river is only navigable by canoes with diffi-

culty. In consequence of this the Senegal River is rather a weak point in the chain of communication with the interior. To remedy this the French are now building a fresh line from Dakar, the new capital of the Senegal Colony and head-quarters of the Governor-General of French West Africa, to Kayes. About half of this railway is completed. The line is well-laid and the work of construction is in very capable hands, so there is no doubt it will be finished as quickly as possible. The saving of time will be enormous; for, in the dry season, when it takes about a month to reach the coast by the present route from Kayes, it will in future only take two days by rail. The train, which runs three or four times a week in each direction, takes two days to go from Bamako to Kayes. The carriages are fairly comfortable, and the railway is much used by natives, who take a childish delight in travelling by train.

The trade of the colony has benefited greatly by the Senegal-Niger line, the output of ground nuts for export to France having particularly shown a large increase. Trains run nearly every day from Bamako to Koulikoro, a distance of only thirty-five miles. The third-class carriages are not uncomfortable. I travelled a short distance in one myself. Some of the compartments extend along the whole length of the carriage, having the two ends open, which makes travelling in the hot weather much cooler than it would otherwise be. Railways in French West Africa are being rapidly constructed, and it is probable that in the next decade the Senegal-Niger, or the Guinea line, will be continued across the French Soudan to the east of the "Bend" of the Niger, and that the existing branches in the colonies of Ivory Coast and Dahomey will be extended northwards to meet it.

The last morning of my stay at Bamako I paid a visit to the market with my "boy." I suppose it is the largest

and most thriving market of the Western Soudan. The produce of the large rice and millet farms of the Niger is brought here for sale, and this comes not only from the district around Bamako, but also from the big grain areas in the Macina province, some 350 miles farther down the river. Ground nuts, which are so extensively grown in the colony, form a large proportion of the produce of the market. But in addition to grains almost every article of trade in the Soudan is brought here. The same heterogeneous collection of different races which I had noticed at Kankan was to be seen, but the proportion of pale-faced, Jewish-looking Moors was larger, while occasionally a stalwart Arab in flowing white robes would show conspicuously amongst the swarthy negroid tribesmen.

A great feature of the Bamako market is the part devoted to dairy produce. There are two distinct portions in this section. One has preserved milk, butter, etc., or in other words, stuff which has been brought from the north of the Niger in goat-skins and is invariably rancid. The other portion contains fresh milk and butter. The butter is made up in tiny round pats, which are allowed to float in the calabashes of milk displayed for sale. Most natives prefer the "preserved" dairy produce, for sour butter and curdled milk are things which the soul of the Bambara loveth, probably finding their flavour more piquant, and condemning the fresh articles as insipid.

In another corner was the live stock. Fine humped cattle from the Niger valley, Soudan sheep from the lake-country in the "Bend," many of which had thick coats of fleecy white wool, and goats from anywhere and everywhere were huddled up indiscriminately together. The horses were all of the same type. The 14 or 14.2 pony of the Soudan rather resembles the Barb pony, but is weedier in appearance; although, from my own observation, I should back the Soudan animal to beat his Barb

confrère in a trial of endurance. I was told that camels occasionally came down to Bamako, but personally I never saw one there. The camel caravan routes nearly all stop on the north of the Niger and Senegal rivers. I fancy these animals are rarely brought across, partly on account of the danger attending the transportation of such unwieldy brutes, and partly because the river-water is said to produce some kind of sickness from which a camel seldom recovers. In any case, there does not appear to be any advantage in introducing camel transport into a well-watered country.

The hotel at Bamako is close to the railway station ; it also possesses a buffet for the use of passengers. This was one of the several surprises which I had on my arrival at the town, for it had never entered my calculations to find an hotel in this remote region. There are two storeys, with four bedrooms on each floor. The dining-room is spacious, and can easily accommodate twenty people. In the afternoon, when the sun is getting low, small tables are placed in the compound in front of the building, and here people congregate to talk over the events of the day while drinking their cognac or cup of coffee, for all the world like restaurant-life in the boulevards of a town in France.

At this hour the tables were generally full, the Frenchman being a sociable person and dearly loving this daily meeting with his friends at the restaurant. In the evening, when the lamps are lighted, two or three card-tables are made up. I noticed that even there bridge seemed to be as popular a game as it is with us. There is a small menagerie in the hotel garden, containing two ostriches and a few other wild animals. It was a strange sight to see the former animals strutting about in their lordly fashion, and, with their extraordinary powers of digestion, occasionally picking up and swallowing a stone in the calmest way imaginable.

CHAPTER XI

Koulikoro—Niger Navigation Service—Rapids on the Niger—The Hourst Expedition—An explorer's death—Horse-breeding.

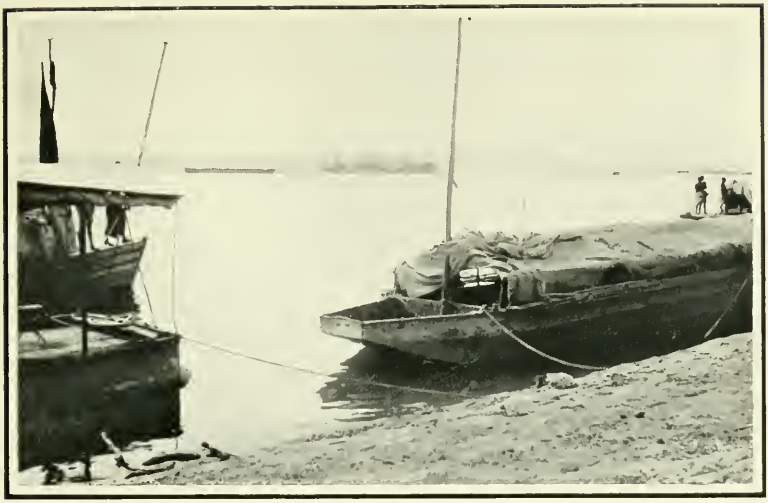
ON the 27th of February I left by the morning train for Koulikoro. The director of the eastern section of the Senegal-Niger Railway, to whom I was introduced, travelled down in the same carriage. Commandant Digue is a most interesting man, with a vast experience of railways in West Africa, and possessing a reputation for great energy and ability. He was formerly an officer of Engineers, but has now retired from the French Army. In the early days of the railway construction many brave men laid down their lives while overcoming the engineering difficulties which had to be faced, and he is one of the few survivors of those hard times.

The line runs through a grassy bush-country a few miles from the left bank of the Niger, and occasionally the passenger catches a glimpse of that river as it twists and turns on its north-easterly course. The train was a slow one, taking three hours to cover the thirty-five miles and stopping at every station. On approaching Koulikoro the country becomes more hilly on the north and west, while the river is gradually seen more distinctly on the east. For West Africa the station is a large and busy one. In the railway yard there are repairing shops with skilled workmen capable of carrying out almost any work that is necessary. There are a large amount of rolling stock and a big engine-shed. The day was Sunday, so our train contained several Europeans who had come over from Bamako

to spend the day with friends here. Several people were on the platform awaiting our arrival; amongst them the local railway officials in white uniform were conspicuous, having come to meet the director of the line.

We went up to the hotel, where I took a room and installed myself for the next two days. This hotel is similar to the one at Bamako, but is more comfortable and a good deal cleaner. The hotels were built by Government and are the property of the railway, but are let to private individuals, who are responsible for the entire management, and charge their own prices. One of my fellow-passengers that morning was a French officer coming down on duty to Koulikoro. We made friends in the train and he had promised to call for me in the afternoon to take me to visit the Director of the Niger Navigation Service. About four o'clock we set out on our visit. The official in question was at home with his wife and two daughters. Madame was a charming lady from Algeria, and she and her daughters had but lately returned from an adventurous trip down the Niger to its farthest navigable point, a place called Ansongo, a distance of about 900 miles. They told me they were the first white women ever to visit Ansongo, and I can well believe that few ladies would care to risk the dangers and hardships of such a voyage.

My new friend, Lieutenant Langel, sang us some most amusing songs to the accompaniment of one of the young ladies, and finally had only just time to catch the evening train back to Bamako. M. Langel, although only a lieutenant, had seen a considerable amount of service in West Africa, having commenced life there in the ranks. He had a large fund of funny anecdotes about the country and was as pleasant a companion as can be imagined. I was indebted to him for introductions to several influential officials it was my pleasure to meet later during my travels.



THE NIGER AT KOULIKORO

Here are collected a number of craft of all kinds, e.g. stern-wheelers, launches, barges, and steel canoes, for it is here that the navigation of the Niger really begins. Koulikoro workshops are very self-contained, all repairs being effected on the spot.

THE NIGER AT SÉGOU

This is a prosperous town, where a good deal of tobacco and cotton are grown. Near Ségou we encountered the worst sandbanks of the voyage. In places the channel was not eighteen inches deep, and we had considerable difficulty in passing.

After the departure of the train an adjournment was made to the hotel, where I met the Resident of Koulikoro and his wife. A tennis-court had been made in the gardens, and it was decided to play. I don't think I have ever played the game under such strange conditions as I have here. The net was locally made out of native fishing-nets, the ground was the flattest piece of rock we could find, with the court-lines marked out in white chalk, while the balls were of ordinary india-rubber, and no one possessed tennis-shoes. The racquets were, or rather had once been, tennis-bats, and were the only part of our equipment resembling the real article. However, it was an amusing game, causing almost as much merriment to the players as it did to the spectators. After tennis we all assembled at little tables in front of the hotel, as the custom is, to take an *apéritif*. Besides myself there were only three men staying at the hotel; these were permanent residents, who were employed in the Government Offices and found it more convenient to live at the hotel than to have a separate establishment in the town.

As I previously mentioned, the terminus of the railway and the head-quarters of the Niger Navigation Service are here, consequently there is a large number of European officials employed at Koulikoro. The navigation service is entirely controlled by the Government. There are several stern-wheelers, small steam-launches, steel canoes and barges in the fleet. These vary considerably in size and comfort. The depth of the Niger alters greatly according to the season of the year. At certain times during the dry season there is so little water in parts of the Upper Niger that navigation even by shallow-draught barges is exceedingly difficult.

In the old days, when there was no craft on the river bigger than the native canoe, journeys were long and tedious. From Koulikoro to Timbuctu, even with relays

of canoemen at frequent intervals, it was impossible to cover the distance in less than three weeks, but now a very different state of affairs exists, and the journey can be done on the average in twelve days. Since the railway has reached Koulikoro repairing-shops and a dock have been made, and the fleet of steaming-vessels has been greatly augmented at this port of the Niger.

One of my companions at dinner was a platelayer in charge of a section of the line between Koulikoro and Bamako. As I happened to mention to him that I should much like to see the rapids on the Niger below Bamako, of which I had often heard, he very kindly offered to take me next morning by trolly to a station within easy walk of some of the rapids. I was delighted at the offer, which I gladly accepted.

Next morning, as the sun was rising, I met my friend at the station, where he had his trolly ready. Our destination was a little place called Kiénéfala, about twenty miles down the line. It was very pleasant in the early morning air as we glided swiftly along, running by our own momentum easily down the declines, while our trolly boys, four stalwart Bambaras, pushed us up the inclines. There is something very exhilarating in the motion of a trolly. The sensation is that of being in a train, but with this advantage, that you have the benefit of being in the open air instead of being shut into a hot compartment. As we rattled merrily along we caught glimpses of bushfowl and guinea-fowl, who, scared by our approach, scuttled into the bush as we bore down upon them. Occasionally a duiker, or bushbuck, would be seen in the distance, terrified at the appearance of this strange, swift-moving object which invaded the privacy of their sylvan haunts. Whole families of monkeys were frequently to be seen gambolling on the track, along which they hurried as we made our appearance, only finally to dive into the bush as

they realized the pursuing demon was overtaking them. Unfortunately I was never able to get close enough to these animals for a successful photograph.

In a little over two hours we arrived at the station, where we dismounted from the trolly. Half an hour's walk brought us to the Niger and we were close to the rapids. There are two sets of rapids which interrupt the navigation between Bamako and Koulikoro. About eight miles below the former town are the rapids of Sotuba, and, below them again, the rapids of Kiénéfala, which we were now visiting. For many miles this section of the river is very rocky and, even for canoes, navigation is difficult. The water was low here and we were able to clamber over rocky boulders into the middle of the stream, from whence we got a capital view of the rapids. As we gazed upstream we could see that the river was split into three channels, separated from each other by huge fragments of rock. Immediately in front of us was the centre channel. On each side of this channel was a rocky wall towering up to a height of thirty feet above our heads. Some two hundred yards away the water came swirling along in a seething torrent, until it suddenly reached the rugged precipice down which it fell in headlong impetuosity. It looked as if no craft could live in that pitiless, rushing stream, yet one or two Frenchmen have successfully descended those rapids.

At the bottom the water flows swiftly through a channel, said to be very deep, and then on for a couple of miles till the rocks begin to disappear and the three separated portions of the river reunite. The water below the rapids is of the most beautiful deep blue colour—a blue I have never seen in any other river, but strongly resembling the blue one sees in the Mediterranean. I could have stayed for hours watching this splendid sight; the grandeur of the rapids, the roar of the waters and the beauty of the blue

stream at our feet carried me away from the commonplace doings of the world. It was one of those moments, which come to us all at times, when one feels mentally and physically in touch with nature.

My companion suddenly awoke me from my reverie, pointing to the sun, which was now high up in the sky. We had to get back quickly as the down train was due in less than two hours. After a little refreshment at the platelayer's house near the station we mounted our trolly once more and proceeded on the homeward trip. At a little village called Madambougou, we halted to examine the graves of some Frenchmen who had been buried there. These men were members of the expedition which descended the Niger in 1884 under Lieutenant Hourst, the well-known explorer. Hourst was a naval officer who organized a small fleet of canoes for this expedition, and starting from Bamako with a few European companions and a following of native canoemen successfully descended the Rapids of Sotuba and Kiénéfala. After descending the Kiénéfala Rapids he made a camp near Madambougou, and, while there repairing damages to his canoes, he lost two or three white men from sickness, while others were unfortunately killed in a canoe accident. For many years the whereabouts of these graves could not be discovered, until at last, when the bush was being cut down in connection with some work on the railway line, the tombstones of the victims of the Hourst Expedition were disclosed. The little graveyard has now been cleared and is kept in good order.

A few weeks later I met a French naval officer, the Superintendent of the Niger Surveys, who had just arrived from France, and had come by river all the way from Bamako, descending the rapids *en route*. He, like Hourst, came down in an ordinary "dug-out" canoe, and, although successful, he informed me it was a thrilling

experience and one he would not lightly undertake again. The smallest mistake or hesitation on the part of the steersman must result in the frail craft being inevitably dashed against the rocks, and there would be no hope for the occupants.

In the early days of French exploration an explorer called Maje had penetrated into the Soudan as far as Koulikoro. Just outside that village he was attacked by the inhabitants and killed on the hill which is to be seen at the south end of the place. Maje's death was not avenged for some time, but his name has since been perpetuated in one of the stern-wheeler boats in use on the Niger; she was lying in the river when I was at Koulikoro, but useless till the next rainy season owing to the scarcity of water at that time.

That afternoon I walked out to Koulikoro Bara, two miles off, to call on the officers of the local garrison. A broad road leads to the village, and the officers' quarters are perched on the top of a hill above it. The road had a soft, sandy surface and seemed to be a favourite resort for riders in the evening. When I passed some half-dozen natives were racing on their gaily ornamented steeds. Excitement among the spectators was running at a high pitch as the cavaliers came tearing furiously down the road, urging their mounts forward with wild cries and much spurring. The winner at the end of the course, shouting triumphantly at his victory, drew rein so suddenly as to throw his horse on to its haunches, to the imminent danger of those following, who narrowly escaped a collision.

I was shown round the barracks by a young artillery officer, who was temporarily in charge of the station, and he very kindly offered to lend me a horse for the remainder of my stay at Koulikoro. But I was unable to make much use of his offer, for when I returned to the hotel I found a

message to say that the steam-launch would leave the following day.

The next morning I rose early as I had arranged to pay a visit to the horse-breeding establishment which was about three miles away. I was met by Captain de Franco, who took great pains to show me the well-managed stables under his care. Very few mares are kept, but the stallions of the establishment are sent out to districts where a good class of mare is known to exist, and the owners of the mares are bound to sell the progeny to Government should they be required so to do. The reason for this is that it was found many of the Government mares were infected with the trypnazome produced by the tsetse-fly-bite. Some of them died, while others dropped dead foals, and so it was considered to be a wiser plan to let the risk of these accidents be borne by the native rather than by Government. Captain de Franco informed me that they had treated several cases of this disease successfully with arsenic, but although the victim's life was saved the horse was never as strong as he had originally been.

The animals were certainly some of the finest I had seen in the Western Soudan. Most of them came from the districts of Nioro and Sokolo, on the left bank of the Niger. They averaged a little over 15 hands, some showing distinct signs of Arab blood. We walked over to the riding-school, where the young horses were being exercised. The riders were native lads, most of whom were expert horsemen before they came to the establishment, I was told. The difficulty is not to teach them to ride, but to teach them to be good horse-masters. They have been used to the brutal native methods, using the cruel native bit, and regarding the horse as a machine incapable of feeling pain or fatigue. Once these ideas have been driven out of their heads they become very useful members of the stables.

The captain was very proud of his house, which he had

built himself with materials specially ordered from France. It was certainly very comfortable and furnished with great taste.

I hurried back to the hotel to find my servant sending the loads down to the wharf. In the last two days I had rearranged my kit, and repacked the "chop-boxes," and had reduced my possessions to twelve carriers' loads. I now went to the Navigation Offices, where I purchased my ticket for Niafounké. I was introduced to the *brigadier de vaisseaux*, the European skipper of the little launch, with whom I had to share a cabin. Accommodation on the boat was limited. There was a tiny cabin with two berths "forard," while other passengers had to pitch their camp beds, if they could find room, in the stern of the vessel. Some of the baggage was stowed in the hold, but the heavier articles were in the lighter which we were to tow. My fellow-passengers were two European non-commissioned officers. One of them was proceeding to the garrison town of Bobo-Djilassu, while the other was bound for Timbuctu. I must say I pitied these two men; they were so cramped in the narrow space allowed them that the discomfort of a journey down-river lasting several days must have been great. To add to the general unpleasantness there was only a thin awning to protect their heads from the fierce sun, so that they could never discard their sun-helmets during the day.

In the bows of the steam-launch there was a small space available, with just room for a couple of chairs, and in the centre of this space was the wheel, where the steersman took up his position. Our crew were mostly Bambaras, three of whom were river pilots. A special knowledge of the river is necessary for the man at the wheel, as the Niger is full of sandbanks, rocks and other dangers to navigators. Our vessel was the "Réné Caillé," called after the famous French explorer of that name, who in the years

1827 and 1828 came across the Sahara from Morocco to Timbuctu, eventually returning to Europe by the same route. These boats are known to the French as *vedettes*, while the stern-wheelers are called *monoroues;* the latter appears to be a misnomer, for these boats have two wheels, and not a single one.

In the lighter towed behind us, besides the baggage, there was a collection of natives. Some of these were soldiers with their wives and families, and a very happy party they seemed to be as they sat on packing-cases at the bottom of the boat, chattering and laughing while we waited for the *brigadier* to come aboard. All formalities were at length completed, and the Director of Navigation came out of his office with our skipper to bid me good-bye.

As we steamed away from the shores of Koulikoro I felt my spirits rise at the prospect of seeing " fresh woods and pastures new," and this bade fair to be one of the most interesting portions of my journey, for at last I was on the navigable Niger, after following it from its source for so many hundred miles and seeing it gradually grow from a tiny, insignificant stream into a fine, big waterway.

CHAPTER XII

On a river launch—Salutations—Crocodiles—An evening halt—Camping on the bank—Tobacco-growing—Cotton-growing—Garrison mess life—Irksome travelling—An enlightened ruler—An excellent shooting ground—A holy city—Kadis—Architecture—Sails of grass—Picturesque pilots—A strike in the engine-room—Flat country.

AS we glided easily down the river I began to think that life on the "Réné Caillé" would be rather pleasant.

It was very enjoyable to sit on deck in an easy chair watching the rapidly changing landscape as we went along merrily at five or six miles an hour.

The river was not more than 400 yards wide here, and its bed was frequently split into three or four channels by spits of sandbank. Many of these channels were certainly not more than forty yards wide, so the little launch required careful handling to get her round the numerous turnings of the stream. On the left bank the Koulikoro Hills were still to be seen gradually extending farther and farther from the shore until they were lost in a blue haze in the distance.

On the right bank the country was extremely flat, vegetation had become more and more scarce, until, on this side, the ground was merely covered with patches of low scrub.

Occasionally we passed a fishing village, a collection of small mud huts huddled together on the river banks. As we steamed by a swarm of black urchins would come out to look at the launch, waving their dusky little arms and shouting greetings.

As evening began to fall a number of tiny islets, fringed with trees, began to appear on the landscape. In spite of the dry weather the trees were clothed in mantles of rich green, relieved only by masses of ruddy, orange-coloured flowers, in places where the beautiful "Flamboyant" or "Gold mohur" tree prospered. Canoes laden with grain and paddled by a couple of sturdy natives frequently passed us, while occasionally a barge under full sail with cargo from the big markets down-stream passed us, speeding on her way to Koulikoro.

The next morning we reached the important trading village of Nyamina. This place was considerably larger than anything we had yet seen. The houses are built of the reddish-brown Niger mud; they are solidly constructed dwellings, the colour of which so nearly approximates to that of the surrounding soil that the inexperienced eye cannot detect the presence of a village until almost within hailing distance of it. Nyamina is on an important trade-route leading from Southern Mauretania to the Niger, and it is at this point that caravans cross the river on their way to the big markets of Bobo-Djilassu and Sikasso. Even as we arrived a big convoy of at least 300 camels, which had just come in, was to be seen watering at the river brink. The camels would not cross the Niger here, but the merchandise would be transported to its destination on carriers' heads. It was the first time on this journey that I had come across camels, and it was a curious thing that at my first view of them I should see no less than 300. We halted here for an hour to take in wood. A certain amount of coal, in the form of briquettes imported from France, is burnt on the Niger vessels, but the majority of their fuel consists of wood. Special arrangements are made with the headmen of certain villages on the banks to stack wood for the use of steamers. When a boat requires fuel she blows her steam-whistle to attract

the attention of the village, and then gives an order for the amount taken to the headman. The latter can obtain payment for his wood on presenting the order to the Commissioner of his district.

On resuming our way we approached a part of the river where sandbanks appeared to be more numerous than ever. After two or three ominous bumps we suddenly felt a severe shock and the little vessel came to a dead stop. We had stuck fast on a sandbank. Our skipper shouted the order to go full-speed astern, but all his efforts seemed unavailing. The crew were then made to jump into the water, and after shoving and straining for about half an hour with the engines going astern the whole time we at last got clear.

Soon after this misadventure I noticed ahead of us a big lighter, flying the French flag in the stern. We rapidly overtook her, and as we came abreast of each other the two crews exchanged greetings, shouting to one another the usual string of salutations which are customary in this country. When one begins to understand the language it is amusing to listen to the varied nature of the questions the native asks a fellow-traveller when they meet. The usual type of question and answer is much like this: "Welcome, my friend, I hope you are well." "Quite well, praise be to Allah, and how are you, my friend?" "I am very well, but is your house in good repair?" "Yes, thank you, but tell me news of your horse." These salutations continue for ten minutes or more, and each traveller wastes a considerable amount of time on every journey in this fashion. Even when the two men have resumed their way they can be heard shouting back salutations to each other as long as their voices are audible. Besides the ordinary greetings, corresponding to our "Good morning," "Good night," etc., these simple natives have such greetings as "I salute you in the rain," or "Greetings for the sun-

shine," and a host of other expressions according as it is rainy or fine weather, etc.

On the deck of the barge were two Europeans, a man and a woman. They turned out to be the Resident of Koulikoro and his wife, whom I had met a few days previously. The former had been appointed a Commissioner in the district of Bandiagara, whither he now was on his way. I expected to meet them again later, as I was likely to be shooting in their district. However, we missed, and I never saw them again. The "Réné Caillé" soon outdistanced the barge, but she overtook us again during the course of the day, owing to our launch sticking, on several occasions of more or less long duration, on sandbanks.

This portion of the river is inhabited by a number of crocodiles. These repulsive creatures are hated and feared quite as much by the black man as by the European. Consequently there were several members of the crew eagerly on the look-out for the crouching forms of these animals as they basked in the sun on a sandbank. Immediately one was seen I used to be informed and would pick up my rifle for a shot. Sometimes even the keen eyes of the "boys" would be deceived, and they would mistake a log for a crocodile; there really is not much difference in the appearance of the two objects, and often one's first intimation of the presence of a crocodile is given by seeing the supposed log suddenly and swiftly slide off the bank into the water. In the dazzling sun it was frequently difficult to distinguish these beasts, for their yellowish-grey bodies would assimilate well with the sand on which they were lying. Sometimes we would see them swimming in the river, the only thing discernible being a black speck just raised above the level of the water, which was probably a bit of the head. The natives are afraid to bathe in this portion of the river, owing to the frequent accidents which have occurred.

Many were the gruesome stories we were told. One of the pilots said he had a brother who was a fisherman in these parts. This man had a small son, and one day the mother had taken him down to the river while she was drawing water. The little fellow toddled a few yards off and began splashing in the shallow water near the edge of the stream, when by some misfortune he slipped into a deep pool and was at once carried off by a crocodile. The mother's first warning was a cry of terror from the child, as it was drawn struggling under water by the horrible creature. The unfortunate woman's horror and anguish as she stood there powerless must have been terrible to witness. Crocodiles are objects of superstition among the natives here. Usually crocodiles in the abstract are regarded as a "juju," but in some cases these animals are kept alive in the village for fetish purposes.

At one place where we halted in the evening there was a big tank in the centre of the village. In this tank there lived a huge crocodile, for which the natives had a wholesome respect not unmingled with fear. Around the tank they had built a strong mud wall, several feet high. The creature used to be fed daily with enormous lumps of meat. He was reputed to be fifty years old, and he probably was a good deal older than that even, for the most aged inhabitants of the place could remember his existence when they were children. Undoubtedly crocodiles live to a very great age.

River crocodiles are said to travel long distances at times. I recollect once in India a river crocodile was found in a small swamp about twelve miles from the nearest water. It was known that no crocodile had been in the swamp previously, and it seemed as if it must have come across dry land for the whole of that distance.

The "Réné Caillé" used to steam about twelve hours a day, from sunrise to sunset. I suppose we covered an average daily distance of sixty miles. Travelling, even by

the moon, at night was impossible owing to the narrowness of the navigable channel. When there is plenty of water in the river boats travel day and night. About five o'clock, or a little later, we generally halted for the night near a village. A supply of wood was then taken on board so as to be ready for an early start next day, and after that duty had been performed all hands were allowed to fall out to cook their evening meal. It was a cheery sight to watch the camp fires dotted about on the river bank, each with a little group of black figures busily engaged in cooking operations, while the little launch lay peacefully at anchor with the last rays of the setting sun reflecting their red light on to her.

I was glad to step ashore and stretch my legs on these occasions. If it was not too late I used to take my gun and a "boy," and stroll off on the chance of getting a shot at a bushfowl or pigeon. On this part of the river there was a big, mottled pigeon. Its colour resembled red-roan more nearly than anything else. This pigeon is about twice as large as a green pigeon, and I always saw it near water. It feeds chiefly on rice or millet. Waterfowl were still extremely scarce; since leaving Koulikoro I had only seen one flight of duck.

The non-commissioned officer, who was going to Bobo Djilassu, was a keen sportsman and used often to accompany me in the evening expeditions. His gun was a 16-bore, and he told me he never bothered to clean it. One day out of curiosity I looked down the barrels. It certainly was in a very dirty condition, and it passes my comprehension how he managed to shoot with it at all. He was not a bad shot at a bird on the wing, but used to say he could not understand the necessity for shooting at birds flying when you could so often get an easy shot at a sitting pigeon or bushfowl! However, we had some pleasant walks together and generally brought in something for the "pot."

Sand-flies on the river banks were frequently very bad at night. I found that my small-meshed mosquito-curtain was invaluable. But the worst time for these plaguy little creatures was between sundown and bed-time. They seemed to be aware how helpless we were, and took the opportunity of making the most of those two or three hours. Big logs of wood were scarce, and somehow a lot of small fires did not seem to give the same immunity from their attacks as did one big log fire. I preferred to sleep on shore, but my companions usually slept on board. The chief drawback to sleeping on shore was that one had to rise in the dark in order to get the kit stowed aboard before we started. The nights were very cool and pleasant, and being safe under my net from the onslaughts of the insects, I always managed to sleep very comfortably.

On the 3rd of March we reached Ségou. This town is 112 miles down the Niger from Koulikoro, on the right bank of the river. As we approached the hitherto brown, sandy banks became fringed with fresh green vegetation; this was tobacco, which is grown to a great extent here. The leaf is small, and therefore, although the tobacco is of good quality, it is not worth exporting to France. The natives smoke it and use it as snuff. Tobacco is a greatly appreciated luxury in this country. It is only grown in strictly limited localities, and invariably commands a high price in the market. The tobacco plantations gradually disappeared as we drew nearer to the town, and wide-spreading trees made their appearance together with the Europeans' gardens of vegetables and flowers. Ségou is the capital of the district of that name; it is an important trading place with a fairly large population of white men.

We were to stay here three hours, so I went ashore to call on the Commissioner. He lived in a well-built mud house, a portion of which was his office. While talking to

him a young Frenchman entered to whom I was introduced. He was the agent of the French Cotton-Growing Association. This gentleman very kindly offered to show me his ginning apparatus, a proposal which I eagerly accepted. M. Level, who spoke English remarkably well, was a most interesting man to meet. He had had a large experience of cotton-growing in different parts of the world, and was therefore peculiarly qualified to speak on this subject. A good deal of cotton is grown in the basin of the Niger about here, Ségou being the central market to which the stuff is generally brought.

Native-grown cotton, as was previously explained, is short in the staple and rather coarse. The French Cotton-Growing Association has tried to introduce the cultivation of Egyptian and American cotton. M. Level had distributed large quantities of these seeds to the natives in the endeavour to induce them to grow a better class of cotton, but, he informed me, the result so far had not been very encouraging. The output had been small compared with the quantity of seed distributed, and this, it appeared, was not so much due to the soil being unsuitable, as to the natives being too lazy to plant the cotton. Ginning is carried on upon a big scale; there is also a hydraulic press for compressing the cotton as it is packed into bales. The Association has its own barges which transport the cotton to Koulikoro for shipment to Europe. There are also two other branches; one in the south of the colony on the Bani River, and the other at Kayes, on the Senegal River.

M. Level introduced me to the officers of the garrison, who took me to their quarters and were most eager to be told all about the life of a British officer in West Africa, and to know whether I thought it differed much from their mode of living. In many cases the French do not have regular messes, but each officer lives by himself, and once or twice in the week each individual takes a turn in inviting

his brother officers to dinner or *déjeuner*. They seem to prefer this method, saying it obviates the disadvantage of the too-close companionship of mess life.

On leaving Ségou we had a recurrence of the troubles of the previous day. In fact, this portion of the Niger is the most difficult to navigate of any part between Kouli-koro and Timbuctu. The channel is continually blocked by shoals, making progress very slow and travelling very irksome. There are a lot of fishing villages about here, and large herds of cattle are seen at times. The fisherfolk are Bosos, a hardy race, but people of no great intelligence. The Bosos are pagans; they are looked down on by the superior tribes who surround them, and appear to have little ambition. These people have ever been a down-trodden race, so that probably any spirit they once had was long ago crushed by their numerous conquerors during the troubled times before the French appeared at the end of last century.

The next day we arrived at Sansanding, where we had to halt a whole day to effect some repairs to the machinery. This place is a semi-independent native State, governed by a native ruler, called the "Fama." It is interesting as being the only native State with its own little Government in the colony, or I believe in the whole of French West Africa. The Fama is a most enlightened man, who was educated at the Government College at Kayes, and after-wards went to France. He speaks French well and has very sound ideas for a native about the administration of his Government. He has built himself a European house, in which he possesses French furniture, pictures, china and a host of modern comforts. He was very hospitable, insisting on our partaking of wine and coffee with him. The town is neatly built and kept in good order.

Owing to the shallow water we had to anchor two miles down-stream, and went up the small creek leading to the

town in a canoe. Between the town and the launch there was a stretch of grassy bush, so, before returning to the boat, I decided to investigate the shooting possibilities of this bit of country, intending to walk back by the river bank. I was alone on this occasion, as the French non-commissioned officer who used to accompany me had disembarked at Ségou, whence he would march to his destination in the south of the colony. The Fama's shooting-ground proved to be an excellent one. The good people of Sansanding had evidently not much acquaintance with guns, and were quite scared when they saw me raise a harmless-looking object to my shoulder and simultaneously heard a report. When a bird fell the astonishment of the natives was great. I believe they thought it the work of some wonderful and mysterious "medicine." Most of my beaters dispersed with marvellous rapidity at the noise of the discharge. Weapons of any description are scarce here, but the chief national arm is the spear, although even that is but rarely seen.

On returning to the launch I found a small fish market was in progress on the sandy river bank. The wives of the soldiers, who were being towed in the steel canoe behind us, were bargaining with great zest and vehemence. It appeared that the buyers and sellers had very divergent views on the subject of what was a fair price to charge. If I had not fortunately arrived on the scene I am afraid the ladies of the two parties would so far have forgotten their good manners as to come to blows.

On leaving Sansanding the boat was hailed by a canoe which just came round a bend in the river as we started. We hove to and awaited the arrival of the occupant. It was one of the sons of the Fama, who had come with a present of milk and eggs from his father. This youth, whom we had not seen on paying our visit to the town that morning, also spoke French and had been to the High School

THE LAUNCH "RÉNÉ CAILLÉ" AT SANSANDING

This little steamer was my home for some 450 miles of the journey down the Niger. We had halted here to take in fuel, and my camera has had the effect of interrupting some heated bargaining between the fish-sellers on the beach and some native passengers.

STEEL CANOES ON THE UPPER NIGER

Steel canoes are a convenient and much-used means of conveyance on the Niger. They are strong, light, of very shallow draught, and at the same time can carry a big cargo of passengers or merchandise. Shelter from the sun is improvised by fixing palm-thatch awnings overhead. These craft can be poled or paddled, according to the depth of water available.

at Dakar for his education. I am afraid, however, that he will never be so fine a specimen of a native as the present Fama, and it seems doubtful if he will have the chance of succeeding his father. I understand that when the present ruler dies the French intend to incorporate Sansanding as a new district in the colony of Upper Senegal and Niger.

The appearance of the river alters considerably from this point. The banks become more wooded, and back-waters and small tributaries penetrate far into the country on both sides. Some of these waterways are navigable for launches, but the channel is narrow and constantly broken into two or more parts by small islands. At Diafarabé the right bank is intersected in a hundred places by these creeks, and in the rainy season the town, which is low-lying, must be almost under water. From this place the interesting town of Djenné can be reached by water. Djenné is the " holy city " of the French Soudan.

The biggest mosques are here, and the priests have the reputation of being the most devout. The standard of learning is also higher here than elsewhere; so much is this the case that the French have allowed an Arabic school to be established at Djenné in preference to any of the commercially more important towns of the Soudan. Almost every village has a " Kadi," who practically corresponds to the " Munshi " of India. He it is who writes all the letters of the villagers, for most of the latter cannot read or write, of course. When a reply comes it is his business to read it to the recipient. These " Kadis " make a profitable income out of this work, and it is at Djenné that they are taught. The letters are written in Arabic characters. All letters are written in Arabic in this country, there being no written native language; it follows that, even if a letter is read out to the addressee by the " Kadi," the former cannot understand the purport until it has been translated into his own tongue. It will

be understood that under these circumstances letter-writing and reading are slow and tedious matters.

The majority of the inhabitants of Djenné are Sonrhais, a nation of whom there will be more to say later. In olden times, probably up to the fifteenth century, they used to display a certain amount of originality in their architecture. The houses of the town are built with minarets and cupolas, while over the doorways and in the windows there is a fair amount of fresco work. This is the only race which apparently had some idea of architecture, for this art is noticeably conspicuous by its absence as a rule among negroid tribes of Western Africa.

There is no doubt that this interesting place has always been a town of importance. It is situated in the richest grain-producing country of the Niger south of Timbuctu, and thus has invariably attracted a large number of traders.

The Niger now becomes deeper and wider, and soon after Diafarabé it assumes a more northerly direction. We passed several river barges about this time; some are owned by the Government and some are the property of private individuals or French trading firms. For sails they use big, mat-like contrivances made out of grass. These primitive sails look very picturesque. They have the advantage of being cheap and easily repaired, but, of course, they are not very durable. The grass out of which they are made grows on the banks, and is a kind of supple reed. They are plaited around sticks, which are pegged into the ground so as to enclose a hollow square of the area of the required sail. When the wind is not favourable these barges are poled.

The pilots now had an easier time, for the water being deeper navigation was no longer such anxious work. Two of these men used to be on duty at a time. One managed the wheel, while the other stood in the bows of our little

craft, pole in hand, ready to take soundings by measuring the depth of water shown by his stick at any place where it shallowed suddenly. These pilots wore rather a picturesque garb, blue and white vests, blue serge, baggy trousers, and a red tam-o'-shanter, the kit somewhat reminding one of the French sailor, from whom it was probably copied. Those not on duty used to spend their time fishing. The fishing tackle consisted merely of a stout line with a hook on the end to which was attached a piece of fish as bait. This line was dropped over the stern and towed behind us as we moved. I cannot say they were very successful with their fishing tackle, for I only saw them make two catches during the whole voyage. Another amusement was to make fish-nets, for which purpose their toes came into great request. The native makes great use of his toes for catching hold of a loose end of rope; indeed, he is often more nimble with his toes than with his fingers.

I used generally to pass the morning writing up my diary, and working out the previous day's observations; after lunch I would join my fellow-passengers on deck, where it was pleasant to sit and read or watch the changing scenery, with an occasional shot at a crocodile by way of variation. About this time we were delayed by a strike in the engine-room among the stokers. Two of these men were so insubordinate as to necessitate their being put in irons; this left us very short-handed. We stopped at the nearest village to try to get two substitutes, but the new hands were so stupid as to be almost useless. To make matters worse some of the machinery got seriously out of order, and we had to slow down in consequence. The whole of the engine-room seemed to be disaffected, and I could not help thinking that the breakdown in the machinery was purposely done by them out of spite. Unfortunately the skipper was newly arrived from France, and had not much experience of the wiles of the natives;

but we were now near Mopti, where villages were less scarce, and the river was widening considerably.

On the marshy, low-lying banks grazed big herds of cattle, followed by an indolent rustic, who turned round to stare in idle curiosity as we approached. Sometimes the launch would let off her steam-whistle, and at the sound of this unaccustomed noise the cattle would career wildly away in terror. Flocks of sheep and goats there were too, but the river banks were often too swampy to permit of the latter grazing near the water's edge. All this country is extraordinarily flat; for miles in every direction there is an uninterrupted view of a flat, grassy plain through which the Niger slowly wends its way. The fall of this river is very gradual, as can be easily appreciated from the fact that it takes 2440 miles to fall less than 4000 feet in its course from the Tembikunda Mountains to the sea. Hence the current is extremely slow as a rule. The river is here still known by the name of Joliba to the natives, and it is not till it enters the British territory of Northern Nigeria that the natives call it Kwarra, or Kworra, a name it preserves until it reaches the sea.

As the river widened we noticed several large creeks on both sides, until we came to a very large stream flowing into the Niger from the east. This river, which was even wider here than the Niger, was the Bani, and as soon as we entered it we saw in the distance the town of Mopti.

CHAPTER XIII

A land of inundations—River transport in the Macina Province—The "King of Mopti"—Mopti—Prospects of the rice trade—Shooting wart-hog—Native huts—The protection of egrets—A lion as a pet—A dangerous joke—Scarcity of wood—The white ant—The driver ant.

MOPTI is the chief town in the rich province of Macina. The province lies entirely on the right bank of the Niger. It extends on the north to Lake Dhebo, on the east almost to Bandiagara, and on the south to the town of Djenné. The whole country is flat, except for a low range of hills to the northward. The towns are all built on slightly rising ground, in order to avoid the floods which cover the country-side at certain times of the year. Indeed, were it not for this slight elevation upon which they stand, they would inevitably be submerged; as it is, they stand out like islands from the midst of the surrounding plains. Practically the whole province is inundated during the season of floods by reason of its low-lying situation.

Two big rivers are the main factors in producing this state of affairs; one is the Niger, while the other is its affluent the Bani. Besides these two big streams there are numerous tributaries of both which play their part in the inundations. Macina is the richest grain-producing country of the French Soudan. Huge areas of land are under cultivation for rice and millet, large quantities being exported annually to feed the people of the Senegal Colony.

The soil is peculiarly adapted to these two cereals. Rice

is grown on the clayey ground found close to the river banks, while the drier, sandier soil found farther away from the rivers is admirably suited to the production of millet.

The country may be, and frequently is, compared with Egypt. There is a striking similarity between the physical geography of the two lands. In each case a mighty river flowing through a flat, sandy country, fertilizes huge tracts of land on its banks by its annual inundations. But here the resemblance ends.

In Egypt nature's handiwork is aided and improved by artificial irrigation—digging canals, making dams, etc.

In the Western Soudan nature does everything and man does nothing. The native is too lazy to dig irrigation canals, for he makes large profits out of his grain crops as they are, and has not the necessary ambition to wish to increase them. " I have enough to eat and clothe myself," says he, " and there is sufficient to satisfy the needs of my wife and children ; therefore, why should I toil further ? " His mode of argument is a natural one and is very common in the fertile countries of West Africa. It is an acknowledged fact that not a quarter of the fertile land is under cultivation, and by judicious irrigation the fertile area could be more than doubled. The population is undoubtedly small compared with the area of the country, but the existing numbers could certainly grow far larger crops than they do at present, without greatly increasing their working days.

The population is augmenting rapidly, as a natural result of the existing prosperity and peace under the French rule ; for this land suffered like so many others from the constant petty wars which were waged up to the end of last century.

In the season of the floods it must be a wonderful sight to gaze from Mopti over the huge lake which spreads its

waters over the face of the land for 100 miles in one direction and sixty miles without interruption in another direction. I regretted that I was travelling in the middle of the dry season, and when I was at Mopti the rivers were confined within their natural limits. I was told that when the country was inundated the game all herded together in the few dry spots available, so that shooting them was positively slaughter. The unfortunate animals are frequently surprised by the sudden and rapid rise of the water, being either drowned or cut off without chance of retreat until the water subsides.

Owing to the existence of these waterways transport by river in the Macina Province is obviously greatly facilitated. The Bani River is navigable to Djenné, 100 kilometres distant, and even at times to the town of Sikasso. Djenné is not actually on the Bani, but a navigable creek connects the town with the stream. Lighters and launches can use that river as long as they can navigate the Niger ; canoes can use it during all the months of the year without difficulty. The future of this province seems to be assured, for the increasing population will give a great impetus to rice and millet growing ; in the course of time irrigation is certain to be introduced, and the revenue will go up by leaps and bounds.

Almost immediately opposite the junction of the rivers Niger and Bani there is a small town, with an imposing-looking building of wood and galvanized iron. The place is Charlotte Ville, while the house, I was informed by a pilot, belonged to the " King of Mopti." Charlotte Ville is really a part of Mopti, and as one proceeds up the Bani the two other portions of which the place is composed come into view. These two latter, being quite two miles from the former, are close together, standing on the top of miniature elevations rising out of the surrounding plain.

The centre portion is the abode of the Resident and

traders; all the natives are being gradually relegated to the southern part; while Charlotte Ville is noteworthy for being the residence of a French colonist. It was this colonist who was mentioned to me as being the "King of Mopti," and I was much surprised to hear that his majesty was a white man. I believe his title originated from a large fortune which he had made, and lost, in the place. In any case he had lived many years at Mopti, had had large dealings with the natives, and was well known to them for many miles around. This gentleman supplied the Europeans with vegetables and fruit from a fine large farm which he had made on the place.

At Mopti proper, where the Resident resides, the place has quite a civilized appearance. On approaching it we could see several European buildings with tin roofs, conspicuous amongst the brown, mud-built native houses. The town is built well up on a slight eminence for the reasons previously stated, a wide stretch of sandy foreshore extending down to the water edge. A few leafy trees throw a grateful shade on the front of the town, otherwise trees are singularly deficient around Mopti. The surrounding plain, when I passed through, was covered with scrubby grass, very much burnt up at this time of the year. The market-place has a distinctly Moorish appearance. This portion of the town is behind the European quarters, and consists of small, narrow streets in which are long rows of mud-built booths, open at the back and front, where are to be seen the vendors of local produce, squatted native-fashion behind their wares.

The Resident was away when I arrived, but I was shown the places of interest by the Assistant Resident, who, by his wide knowledge of the natives and the country, had evidently an extended experience of them.

A road is being built from the main town to a low range of hills in the north, in order to connect the place with dry

MOPTI. STREET SCENE

The appearance is decidedly Eastern. Natives squat in their mud-built stalls haggling, as is the manner of their kind, over some trifling bargain. Trade routes from the Ivory Coast, Gold Coast, Dahomey, and the distant eastern "Bend" of the Niger all send their quota of produce to this market.

land during the floods. The road is an embankment some thirty feet above the plain and its length is to be about eight miles, so the task is not an easy one. Another road is to be constructed to unite Mopti proper with the native town. A fair road exists between Charlotte Ville and the Residency, so that very shortly the three portions of Mopti will be permanently connected.

A big school is also being built, to which the surplus pupils of the Djenné Arabic College will be sent. Altogether Mopti is a very go-ahead little town, and certainly one of the most prosperous on this section of the Niger.

At Mopti I was introduced to an interesting French merchant, M. Simon. This gentleman has done much to try to improve the quality of rice put on the market by the Macina Province. I mentioned that a quantity of this rice was exported to Senegal, but it did not find great favour there, because it was dirtier in appearance than the Indo-China rice, also the latter could be bought almost as cheaply at St. Louis as Macina rice. The high rate of transport on the Senegal-Niger Railway was largely responsible for this big price. M. Simon was of opinion that if the rice were cleaned locally it would be more appreciated at St. Louis, and, further, that by setting up a mill at Mopti, the cost of unhusking it could be materially reduced, permitting it to be sold at a lower price and thereby successfully competing with the Indo-China article. The rice is not really dirty, but grain grown in this country has a small reddish streak in it which gives it an unappetizing appearance in comparison to the milky white rice from Indo-China.

M. Simon has imported a mill which can perform three distinct operations :

(1) Clean the rice.
(2) Unhusk it.
(3) Scrape off the red skin.

This mill can treat 2000 tons per annum. M. Simon proposes to import a 100-h.p. engine which will be able to deal with 2000 tons yearly. By this means he will be able to so lower the cost of his rice as to sell it at St. Louis for 180 francs per ton, instead of 210 francs, the present price. When the Thies-Kayes Railway, connecting Kayes with the coast, is finished it is thought that it will be possible for Government to reduce the freights by rail considerably, and a further fall in the price of Soudan-grown rice may be confidently looked for.

Owing to the trouble in the engine-room it was found necessary to wait at Mopti for two days. Here also there was a suitable opportunity of punishing the malefactors who were responsible for the breakdown. We were all very pleased to hear that they had been heavily fined and had had their licences taken away by the Commissioner.

The night of my arrival I dined with the French officials, and one of the dishes consisted of some excellent venison, which I was told was a haunch of wart-hog. It appeared that these beasts were plentiful in the vicinity of Mopti, so it was arranged the next day to have a shooting expedition in the wart-hog country. The animals were on the other bank of the Niger, a very early start being necessary in order to reach their haunts by daybreak. My French friends were unable to accompany me at the last moment owing to pressure of work. At 4 a.m. I started off in pitch darkness, being paddled down the river in the Government canoe by a couple of sturdy Bosos.

The air was chilly at that hour as we moved swiftly through the water. Stillness reigned around us for the first half-hour, until, about dawn, the phantom shapes of flighting duck and geese began to show themselves. At the risk of being a bit late for the wart-hog I could not resist the chance of some sport with the duck on the river,

so I ordered my canoemen to paddle the craft into a sheltered nook under the reeds, where I was concealed and in a good position for the birds as they flew overhead. We were evidently at last getting into the waterfowl region, for hitherto I had seen but few on the Niger. After some pleasant sport in which I managed to collect three or four varieties of duck, besides a goose and some teal, I urged the canoe boys to hurry on to the spot where I was to land. The sun was just rising as we stepped ashore at a small village. The country was a swampy tract along the river bank, such as the wart-hog delights to roam in. On the west, as the ground became firmer, it was covered with patches of mimosa bush and low scrub, where the pig would come and feed in the early morning and evening, while during the day they made their lair in the low ground. We had not gone far when a grey object loomed up in the still, uncertain light, looking so much like the trunk of a mimosa tree that I hesitated whether or not to fire. The object was not more than seventy yards away, affording an easy shot. During that interval of uncertainty I saw the thing suddenly turn and gallop away at a good pace, settling the question of its identity once and for all! It certainly was a wart-hog, so I took a flying shot at its retreating form. It careered on however, untouched, with its tail contemptuously curled up behind it, in the ludicrous fashion adopted by these animals when frightened. I had started the morning badly, and could not help thinking I was unlikely to get another such easy chance.

Tracks there were in plenty, but it was not till I was well on my way back that I managed to shoot one. My first indication of his presence was given by hearing the peculiar grunt to which they give vent when disturbed. He only trotted a few yards off, however, before halting to stare at me, thus giving an easy chance. These animals are very

stupid and curious; indeed, I think they show more inquisitiveness than antelopes. I have frequently watched a wart-hog turn round to stare at his pursuer four or five times before he gets out of range; the result is, of course, often fatal to him. The curious excrescences on the beast's face undoubtedly make him one of the ugliest of living creatures, and the white, curling tusks projecting from his jaws tend to enhance his uncouth appearance. Wart-hog are very plentiful all along the Niger, from Mopti to Timbuctu. The "Bend" of the river is one of their favourite habitats, particularly that portion where water is plentiful, and which is generally called the lake district. I have often seen them in droves of eight or ten, and have generally found them far from being wary, so that they are easily approached. Their sight is bad, but they appear to have a fairly keen sense of smell. I do not think they have very sharp hearing.

On the way back to the canoe we made a detour through some grassy country, where I picked up a couple of lesser bustard. I also saw some greater bustard, but my efforts to approach within rifle-shot of these very cunning birds were unavailing. Both kinds of bustard seemed to be common about here, but the greater was less common than the lesser species.

At the village on the river bank I had to wait a short while for the meat of the wart-hog to be brought in. The headman of the place asked me, with well-meant hospitality, to rest from the heat of the sun in his house, but after a glimpse inside I decided it was far cooler and pleasanter under a tree in the open air. The houses in this part of the country are made of mud, circular in shape, with roofs of grass thatch. Verandahs are unknown, and as there is but one small door, ventilation is very indifferent. The houses in the hot weather are like ovens, for I suppose the temperature in the day is well over 100 degrees inside

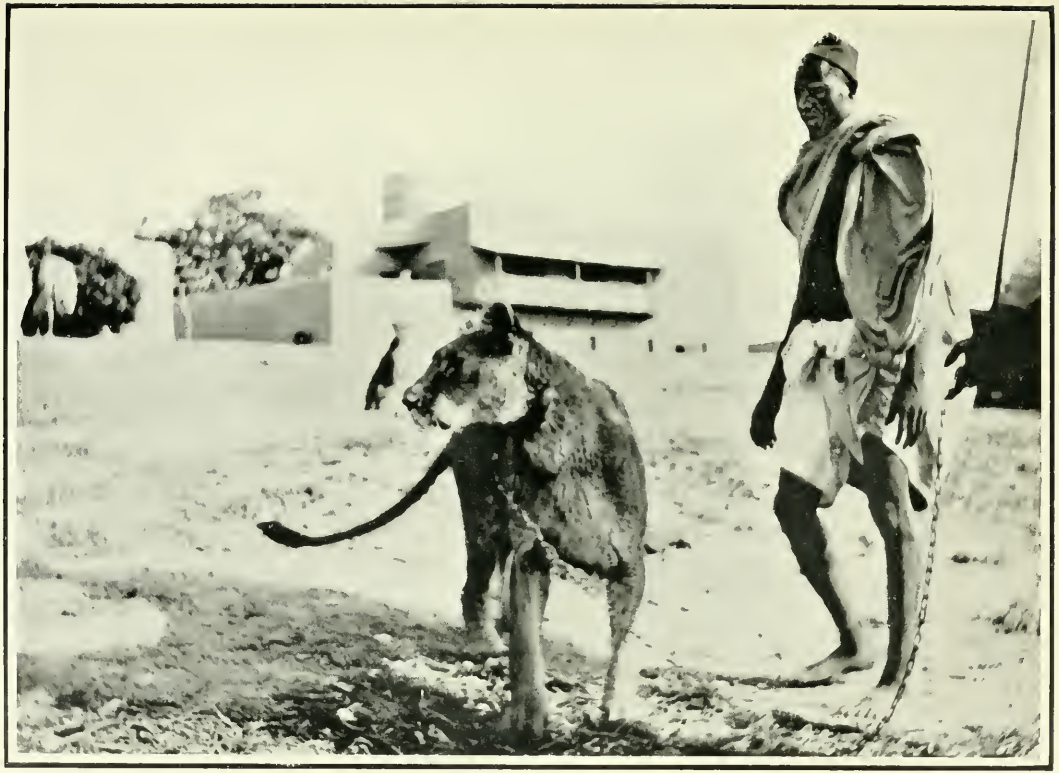
them. At night the numerous members of a large family are all crowded together in this small space, so that I should imagine the atmosphere must be even more intolerable than by day.

On our way up the river to Mopti I saw several white egrets. These beautiful birds, which used to abound on the Upper and Middle Niger, have greatly decreased in numbers during the last few years. The reason for this is that a great trade in egret feathers used to be done by French merchants, and thousands of the creatures used to be slaughtered to supply the market. I was told of several men who had made considerable fortunes in this way. The practice was particularly cruel, as the most valuable feathers only grow during the mating season, the massacre of the birds thus tending rapidly to wipe out the whole species. The matter was, however, strongly represented to the French authorities, who took strict measures to suppress the wanton destruction of egrets on the Niger. A fine of 1000 francs is now imposed on any offender, and the result of this law has had a most salutary effect in preventing these birds from being shot, so that it is much to be hoped that in a few years they may have regained their former numbers. The best feathers are found on the back, and comparatively few can be obtained from one bird, consequently a large number of egrets must be killed to produce a fair " bag " of feathers. Besides the white egret there is also a grey egret. The latter variety is not so valuable as its white relation, but the colour is a very beautiful French grey.

At Mopti one of the merchants had a tame lioness. This beast was quite a cub when it was captured, and the story of its capture is rather an interesting one. One day when shooting near the river banks he had killed the mother of a big family of lion cubs, and was leaving the scene of the exploit when he heard a whining noise in the

bush hard by. On searching in the foliage he discovered this young lioness, which refused to follow the example of its brothers and sisters who had all bolted at the report of the rifle. This little beggar appeared to be heart-broken at its mother's death, refusing to leave the spot. She was easily captured, and has been a pet ever since. She was about twelve months old when I made her acquaintance, being kept chained up in the courtyard at the back of the trader's house. Her owner says she is perfectly harmless, but I would not feel inclined to trust her very much—her manners were decidedly rough! She used to play with the dog when younger, and I was told they were fast companions. A beast of this description is certainly difficult and expensive to feed when it arrives at maturity. Our friend in this case used to make a meal off a big sheep or else two goats daily. She was not given a full ration, for, as the Frenchman her master explained, if she were too well fed she would grow so strong as possibly to be unmanageable. I am afraid that even now she is getting out of hand, and any day may have to be destroyed to prevent a disaster.

While at Mopti I met a young Frenchman who had been wounded in rather a strange way when on a hunting expedition. As may be gathered from the following story he was not very experienced, or such an accident could never have occurred. He and a friend had made up a shooting expedition in the same locality where I had been for wart-hog. They separated at one patch of bush, with the intention of meeting on the other side. The young fellow, thinking he would have a lark at his friend's expense, and apparently never dreaming of the danger he might incur, made his way through the bush in the direction of his friend, halting every now and then to emit a grunt in imitation of a pig. The other sportsman, seeing a dark object half-concealed in the foliage, and



A Captive Lioness at Mopti

This animal was about a year old and had been brought up from days of cubhood by its owner. The beast had an uncertain temper, so could scarcely be called an affectionate pet. She had quite recently sprung on a sheep which had unwarily wandered within range of her chain, and made a substantial meal off the carcass!

thinking by the noise it made that it was a wart-hog, fired his rifle. To his horror as the object dropped it uttered an unmistakably human cry of pain. He then discovered that he had fired at his friend, wounding him severely in the leg. Under the circumstances the latter was distinctly fortunate not to suffer worse injuries. He might very easily have been killed, and, of course, no blame could have attached to his companion. The young man had been on crutches for some months at the time I saw him, but luckily the injury would not permanently affect him. Another fortunate point in the business was that the bullet was not a sporting one, but solid-nosed, and simply went straight through the leg, emerging on the other side without shattering the bone, as it unquestionably would have done had it been of a different make.

Before I left Mopti the Commissioner returned. He had been to Djenné to buy wood for building the school. It is a strange fact that at Mopti there is practically no wood. Almost the only wood suitable for building purposes in this part of the French Soudan, and indeed for many hundred miles down-stream below Timbuctu, is the wood of the dum palm. At Djenné this tree grows profusely.

The great enemy of the carpenter in West Africa is the white ant. This tiny creature has a most voracious appetite for wood, but certain kinds, amongst others the dum palm and the cocoanut palm, are impervious to his attacks. White ants always work in large numbers. They can be seen travelling along in armies of several thousand, marching in single file or two deep, and following a little groove or channel which they have excavated for themselves. Their presence in wood is first detected—if you are lucky—by observing a narrow streak of earth running along the object they are attacking. This is in reality a tunnel, which covers them and affords them shelter while they work at the wood underneath. They are most per-

sistent little creatures, seldom abandoning the object they are devouring until they have eaten right through it.

If you are not fortunate enough to discover their presence by the appearance of the earthen tunnel, your first intimation will probably be given by the sudden collapse of the particular article upon which they have concentrated their efforts. If this happens to be one of the uprights which support the roof of your house, even if you have the good luck to escape without personal injury, it is trying to suddenly find the building in ruins. Hence the necessity of using a wood which can resist their onslaughts. Tarring wood will to a certain extent keep them off, but it is by no mean reliable. The only way to preserve wooden boxes and similar articles, which generally rest on the ground, is to put saucers of water underneath, for the ants will not then be able to climb on to the wooden surface.

Ants of several species are common in West Africa. Another kind, which is in many ways more irritating even than the white ant, is the driver ant. This animal also travels in big armies like the one already referred to. The " driver " is only found in bush-country. I never came across it in the drier, sandy soil of the Western Soudan, where vegetation is not so luxurious as in the countries nearer the sea-coast. He is brown, and larger than the white ant. His particular hobby is to bite. He is certainly an adept in the art of biting, as his unlucky victim soon discovers to his cost. The " driver " is often seen on a bush path in the daytime, when the best way of avoiding a close acquaintanceship is to leap over the track he is following, and then vigorously shake your feet as soon as you have got well out of his range, for despite all precautions some of the followers in the army will be fairly certain to have succeeded in attaching themselves to your legs as you passed.

But when the " driver " elects to come at night, as he frequently does, you probably have no warning of his approach until you feel his bite. Once they have settled on a victim they swarm mercilessly over him in thousands, and, if left to work their evil will unmolested, they will not leave the object of their attacks until they have devoured it. I recollect on one occasion having a very miserable night owing to " drivers." I had gone to bed rather tired after a long day's march, when I suddenly woke up with unpleasant stinging pains in my legs. I quickly realized that I had been attacked by " drivers." Leaping out of bed and striking a light I discovered my blankets were covered with a black swarm of these horrible creatures, several of which had settled themselves on my limbs with some tenacity. On summoning my servant we tracked the long line for about a hundred yards down the clearing in which I was camped to some dank vegetation out of which they were emerging. The only chance of turning them aside and getting a little sleep that night was to light a fire across their tracks.

To add to the general discomfort it was pouring with rain, and a fire was not an easy thing to kindle ; however, at the cost of most of the kerosene of which I was possessed, we managed to light a fire and head them off. In such cases it is usually the best policy to shift your camp and leave the ants the masters of the field, for they are extremely hard to turn aside, and I have seen them put out a fire by sheer force of numbers. In some parts of the country, where the natives are pagans and indulge in human sacrifice, a common method of killing their victim is to tie the individual up, stripped of clothing, in such a position that movement is impossible, leaving the " driver " ants to consume the body. The tortures of such a slow, agonizing death must be terrible. A friend of mine once had two puppies devoured in this way. His fox-terrier

bitch had a litter of three puppies one evening, and the following morning only one remained. The ants had invaded the dog's basket during the night, and the mother had only been able to save a single member of her family from her pertinacious enemies.

CHAPTER XIV

Fulani cattle—Lake Dhebo—Duck shooting—Teal—A tough bird—The Niger River winds—Towing a barge—Niafounké—The edge of the Sahara—Stalking birds—Sheep-farming—Developing the wool trade—Raided by a leopard—Ostrich-farming.

ON the 9th of March we left Mopti, finding considerably more water in this section of the Niger, chiefly due to the increase in its volume caused by the influx of the Bani. On both banks there were now wide stretches of rich green grass springing luxuriantly out of the spongy soil, which even at this season was covered with several inches of water. Big herds of Fulani cattle, often immersed to the withers in water, could be seen grazing as we steamed easily past the banks. The cattle had a strange appearance, as not much more than their heads were visible, but stranger still was the cowherd, who, mounted on one of his beasts, also in the water, the better to supervise their feeding, urged them on from time to time with weird cries and thwacks from his staff.

The grass which grows on the banks of the river from Mopti and away down the Middle Niger is called " borgou." It is very fattening, as it contains a large percentage of sugar, hence probably the fine condition of the herds in this region.

The river was more than ever broken up into creeks and channels ; to me it seemed a hopeless task to know which was the correct one to follow, so similar and so numerous were they. Often the wider branches were merely backwaters, running a few miles inland ; but the pilots were

never puzzled and evidently knew their work well. Sometimes on one of the swampy banks there would be a large open piece of water, upon which could be seen myriads of duck and geese revelling in their feeding-grounds undisturbed by the sportsman.

As we progressed a thick mist began to enshroud the landscape. We were approaching the great lake, Dhebo, around which this curious mist generally hangs. About 5.30, just as the sun was setting, we reached the lake. The entrance is marked by two curious bare sandstone hills, standing out like sentries above the surrounding flat country. As the "Réné Caillé" suddenly emerged from the river as far as the eye could see there was a wide expanse of water covered with miniature, frothy waves, which, except for the occasional patches of reeds peering here and there above the surface, might easily have been mistaken for the sea. The lake, however, is very shallow. In many places a man could wade across without much difficulty. Dhebo forms a natural reservoir for the waters of the Niger in a singular manner. When the rains fall in the mountains of Tembikunda and Futajallon, in French Guinea, the Upper Niger naturally rises and the lake fills up. This continues from about June to October. All this time the Middle Niger, which has no tributaries, owing to the dearth of mountains and the proximity of the desert, is getting dry, more especially as rain on that portion of the river is so infinitesimal in quantity as to be of no consequence. Towards the end of the rains the lake fills up and overflows, replenishing the Middle Niger. The overflow from Dhebo continues to fill up the Middle Niger, but all this time the upper river is decreasing in volume owing to the cessation of the rains in the Guinea Mountains. Hence the curious phenomenon is observed of the Upper Niger subsiding as the Middle Niger increases, and vice versa. It is for this reason that when the Upper Niger is

unnavigable for steam-launches these boats can work on the Middle Niger.

The "Réné Caillé" had orders to ply only between Mopti and Kabara (the port of Timbuctu) after this journey, as the water in the Upper Niger would now be insufficient for her. The bed of the lake is covered with a kind of river oyster, which is said to be excellent eating, but I never tried it myself, although we dug up a number of them as we crossed the place. The skipper was anxious to make a port on the other shore of Dhebo that night if possible, but we had entered the lake so late that it was dark very quickly. Owing to the width of the lake it was hard by day, but impossible by night, to pick up landmarks by which to steer. The lake being shallow and sandbanks numerous, steering by the compass was not of much use, so after many bumps it was decided to anchor for the night and continue the journey at daybreak. A cold wind blows nearly all the year round on Dhebo, so that night I was glad of my blankets for the first time since quitting the Tembikunda Mountains.

In the morning I was up betimes to have a good view of the lake. The mist was rising and I could plainly discern a small village towards which we were steering, and farther ahead still was a wide silver streak flowing northwards out of the lake. The village was the fishing-place called Akka, where we were to take in some more wood, while the river was the Issa-Ber. At this exit of Lake Dhebo the Niger splits into two large streams, the Issa-Ber and the Bara-Issa, both of which are navigable, and which reunite at a town named El Wal-Oueji, about 120 miles further down-stream. The main branch, and the one we were to follow, was the Issa-Ber. This flows past the town of Niafounké, whilst the Bara-Issa flows past the town of Saraféré, where I was to make its acquaintance later, to the east of the former river. The journey to

Timbuctu by either stream is of about equal length, but the route by the Issa-Ber is preferable as the channel is wider.

At Akka I hoped for some duck shooting while the launch was getting fuel. It was quite early when we anchored off the village, and I went ashore, gun in hand, accompanied by a couple of the crew. Behind the place were some likely-looking swamps and small lakes, whither we bent our steps. Having secured the services of a local rustic to show us the best spot, I hurried off in order to make the most of the short time at my disposal. The first place we approached was surrounded by a fringe of tall reeds, affording excellent cover for a gun. Near the opposite shore there were a number of various kinds of duck and teal enjoying the morning air and unaware of our presence. I instructed my followers to manœuvre round to the other side, while I cautiously crept into my position in the reeds on the near bank. The beaters soon began to approach the birds, amongst whom there were evident signs of unrest, as they started to chatter and flutter their wings in the water. Presently up rose a cloud of what looked like white-plumaged birds, which came flying rapidly towards me; as they circled over my head I had a right and left at them, bringing down one bird with the first barrel. They now whirled swiftly away towards the opposite shore, but before I had reloaded I saw some grey teal rapidly approaching. I had time for a barrel at them before they were out of range, when some more duck and then some geese hove in sight.

As soon as the birds returned towards the beaters they were driven away with loud cries and volleys of stones hurled in the air in their direction, whereupon they usually circled back towards me, evidently much disconcerted and unable to understand the unwonted report of my gun, with the occasional fall of one of their number. Altogether

I had some capital sport, and was loath to hear the warning whistle of the launch, indicating that we must gather up the spoil and retrace our steps. Most of the birds were picked up, and I had collected a nice little bag. The white-plumaged duck which I had first shot proved to be a fine big bird, spur-winged, weighing eight or nine pounds, and although it looked quite white in flight the back was covered with rich black and dark green feathers.

The grey teal is a beautiful little bird, very swift of flight, and quite the most delicately flavoured of any waterfowl I shot on the Niger. This teal has a brown beak and light mottled grey breast darkening to partridge colour towards the tail. The wings are a beautiful pearl-grey, while the back is a darker shade of the same colour. The feet are dark grey. It is common on the swamps and lakes north of Dhebo. There was another grey teal of about the same size as the one described, but of a uniform mottled grey partridge hue. At first I thought it might be the female of the other grey teal, but I am inclined to think it was quite another species and was certainly much less common.

The goose I shot was a bird weighing about ten pounds, the wings and back were copper-coloured, the breast and under surface greyish white, while the legs were yellow and the beak red. The Bambaras called it "bio-lou." This goose was very common north of Mopti; it is frequently seen feeding in the fields during the daytime. I cannot recommend it as a dish. The flesh is extremely tough. Even when well stewed it was almost too hard to be eatable; finally, I used to use it only for making soup. The largest game bird I saw on the Niger was a duck which must weigh at least fifteen pounds. It has a black beak, with a very distinctive red knob on its nose, just like a Barbary duck. The body and breast are black and white, while the wings are black, with a dark greenish tinge. This bird is also spur-winged. It was so large that I used

to have a joint off it, treating a leg as one would a leg of mutton.

After leaving Mopti we encountered the Niger River winds. These winds blow almost permanently from the north-east, that is to say the general direction is up-stream. The result is that progress up-stream is frequently more rapid than when one travels with the current, for in the latter case the wind on this section is adverse. The wind accounted also for the waves on Lake Dhebo, making the motion so unpleasant that I could easily believe the skipper when he said people were often sea-sick here. One or two barges we passed under sail were spanking along at a great pace up-stream.

The day before our departure from Mopti a French gentleman had arrived from Djenné in a lighter. Owing to the strong head winds he could not make any progress in his craft, so arranged to be towed by us. He was a newspaper reporter, who had come out from Europe to study and write a report on certain native tribes of the Western Soudan. M. Malbranque had made some interesting investigations at Djenné, and was now *en route* to Timbuctu for a similar purpose. His barge was lashed alongside us, so that one could easily step from one boat to the other. The roof of his lighter made a pleasant spot upon which to rest and watch the passing scenery. We used to sit together and have many interesting discussions about travel. He was a man with a wide experience of French colonies, who had been in most parts of the world in connection with his literary labours. His river barge had done a long journey already. He had started from Koulikoro, some three weeks before me, but passing to Djenné from the town of Diafarabe, and then following the Bani River to Mopti.

The Issa-Ber is here nearly half a mile wide, and with such a fine depth of water that we steamed along merrily,

having no longer any fear of sticking on a shoal. After leaving Lake Dhebo the aspect of the banks changed considerably. The vast pasturages of "borgou" on the banks gradually disappeared, giving way to a sandier soil, well wooded near the water's edge. As we approached Niafounké the western shore grew more sandy, while the trees and scrub became more scattered. Our first view of the station was a glimpse of three rectangular mud-built houses, standing on rising ground not far from the river bank, with the Tricolour waving proudly in front of the centre one. The native town was tucked away in a dip of the ground behind the Residency, so was not visible from the river.

As we came alongside the little jetty two or three French officials advanced to meet us. I was introduced to the Commissioner, his assistant, and the doctor, and invited up to the Residency, where I was to put up. I had arranged with the skipper of the "Réné Caillé" to take my surplus baggage on to Timbuctu, as I intended to travel light, only taking a month's supplies on my hunting expedition into the "Bend" of the Niger. I had spent a pleasant ten days on the little launch, and now said good-bye, for she was to start off that evening and would travel day and night till she reached Kabara. The river being now so much wider and deeper, navigation by night was easy. So the "Réné Caillé" steamed off, and we went up the hill to the station. My host gave me a most palatial room in his house, in which I felt lost after living in half a tiny cabin on the launch for the past few days.

That evening we were a pleasant party of seven. Besides the officials, two men from a sheep farm had come to dine, and I had to promise to pay their farm a visit before leaving the neighbourhood. The doctor and I made great friends. We had much in common, as he was almost as keen on sport as myself. He had a good deal of leisure

time at Niafounké and had spent a considerable portion of it in shooting. We arranged for an expedition the following morning, as I had decided to pass two days here, giving me time to settle my best plan of campaign for the future.

The next day we were out before daylight, equipped only with light rifles, as we did not expect to see anything bigger than haartebeest, while we would probably only see gazelle.

We were evidently on the edge of the Sahara, for the soil was very sandy and vegetation of the stunted, desert variety. The trees were mostly mimosas, and as the sun rose the delicate fragrance of their golden blossoms was wafted towards us on the morning air. That morning we did not see much big game, in fact it was not till we were on the way home that we saw a small herd of red-fronted gazelle. We each had a rather long shot, and each of us missed. Small game, however, was abundant. Amongst the mimosa scrub we frequently saw hares darting about, while sand-grouse were very numerous. The latter were strangely difficult to see, as they crouched close to the ground, their speckled yellow colour harmonizing exactly with the sand in which they lay. They would sometimes get up almost at one's feet, unperceived, until one heard their peculiar cry and the whir of their wings as they swiftly darted away.

Here I saw the doctor successfully practise the trick of approaching a greater bustard by stalking it in an ever-narrowing circle. The plan is an extremely simple and apparently effective one. The stalker, perceiving the bird at a distance of about 200 yards, proceeds to walk round it slowly in a circle of this radius. After completing a circle he gradually decreases the diameter, moving slowly the whole time, until he is within about fifty yards. At this point he cautiously goes into position with his rifle and has a shot. The bird does not seem to notice the

gradual diminution of distance, and in this way seems to be fairly easy to approach. It is certain that to attempt to get within shot in open country is difficult in any other way.

On the homeward road we passed a small stream where guinea-fowl and bushfowl were plentiful; indeed, it seemed strange that in this narrow fringe of country almost bordering on the desert, there should be such a quantity of small game. We came across several thorn zaribas, used as sheep-pens by the natives in order to protect their animals from the lions which prowl around this region. The doctor informed me that no lions had been seen for some months past near Niafounké. However, these animals travel great distances in a short time and they might turn up again unexpectedly at any minute, so the native is wise to take precautions.

Niafounké is the last district under civil administration on the Middle Niger. The remainder of the country is administered by the military authorities. The Resident very kindly gave me one of his policemen to accompany me till I arrived at Timbuctu. The uniform of the policeman has a great moral effect on natives, so I was pleased at having this man to assist me in the villages through which I would pass. The last afternoon of my stay the doctor and I went on another shooting excursion. Our plan was to ride out to a place where we would probably get some wart-hog and gazelle, then in the evening we were to go on to Gauba, where the sheep farm was, and where we intended to spend the night with the two men I had met at dinner the previous day.

We had a pleasant ride, but fortune seemed to have deserted us much as she had done the day before. My friend had two difficult shots at a gazelle, but was unsuccessful; while I only saw one wart-hog when it was too dark to shoot.

The sheep farm is almost on the Niger banks. It is purely experimental, being started by Government to try to improve the breed of the local sheep. The native sheep of the Western Soudan is not a bad little animal, and gives a fair crop of wool. The wool is, however, rather coarse, and it was thought that the quality could be considerably improved by obtaining a better standard of sheep in the country. Experiments were first tried by breeding from specially selected animals belonging to the country, but results were not very encouraging. It was then decided to import from Algeria a certain number of rams for breeding with the native sheep.

Before dinner we paid a visit to the sheep-pen. One of our party was a veterinary officer, who had just arrived to investigate some sickness which had recently broken out among the animals. There were forty of these Algerian rams, but unfortunately the sickness referred to had spread to an alarming extent amongst them, and when I saw them they were in poor condition. Shearing had been taking place that day, some very fair samples of wool being shown me. In spite of their haggard appearance the Algerian rams were decidedly superior to the West African sheep, the latter looking surprisingly small and puny in comparison. The enclosure in which the sheep were penned was a mud wall six feet high, while the only entrance was closed by a stout wooden door heavily barred. I was struck by the thickness of the door and asked the reason for such precautions. I was told that leopards were common in that district, so it was advisable to secure the sheep against a possible raid. Strange to relate, that very night we were to have an illustration of the presence of a leopard!

The natives of this part of the Niger keep big flocks of sheep, the price of one of these animals being ridiculously small. A big sheep can be bought for 1 franc 50 cts.,

and the mutton is of quite good quality. Any science in breeding is, however, totally unknown to these people, hence the breed is tending to deteriorate. During the cool season the sheep have plenty of pasturage, but towards the end of the hot season food is scarce and poor. The French are anxious to develop their wool trade, hence their efforts to improve the quality of the wool which is produced in the Western Soudan. For such articles as rough carpets, blankets, etc., the existing wool is much used in Europe, but a finer quality is required if the trade is to be really remunerative.

A white blanket is made from the wool of the Soudan sheep, and is embroidered with red or green threads. This blanket, although rough, is a most serviceable article on the cold nights so frequently experienced in this part of the country. The natives use them as a covering for themselves by day, and as a bed-wrap at night. This was the only article manufactured by these people with their own wool.

Some time after we had retired to bed I was suddenly aroused by hearing loud exclamations of alarm proceeding from the native quarter close by. I rushed out with my rifle in hand and was met by my hosts, also in night attire, the veterinary officer being armed like myself. A scared negro appeared at this juncture with the news that a leopard had come into the sheep-pen, having jumped over the wall, and had carried off a sheep. The alarm had been raised by hearing a commotion in the pen, and the leopard was actually seen by one man bounding over the wall with his prey. The vet and I immediately started off on the frail hope of coming up with the animal, but as there was no moon the tracks had to be followed by a lamp. This tedious process led us eventually to some bush, in which the tracks were completely lost. The following morning the animal's pug marks were distinctly

visible near the house in which we had slept. It appeared to have circled round the place several times before it had made its raid on the sheep. After this accident the wall of the sheep-pen was raised considerably, the top being covered with a few strands of barbed wire.

A mile from Gauba is the Government ostrich farm. The farm is managed by a European—who was unfortunately absent when I was there—and contains about forty birds. These have been caught young by natives and are kept with a view to breeding. The ostriches give two crops of feathers annually, in January and June. At present the farm is only in an experimental state, but it is hoped in time to produce a large quantity of feathers from the place. The manager was then on a tour down the Niger in order to try to find a more suitable site for the farm. It must be near the desert, for ostriches are more easily obtained from natives there; also, it is found that the desert air is better suited to the birds, which produce finer feathers if kept in their natural atmosphere. From Niafounké down-stream, and upon both banks of the river, ostriches are found. Sandy country is essential to them, hence in the parts where there are widely irrigated areas between the rivers Issa-Ber and Bara-Issa, the birds are not met with. Although ostriches are fairly numerous in certain parts of the country, it cannot be said that they are at all common. They are extremely shy birds, thus being most difficult to approach. Their eyesight is wonderfully keen. They will perceive you when you are still 600 yards off, and it requires great patience and energy to successfully stalk them within practicable rifle range. Their commanding height gives them a great advantage when pursued by man, and the speed with which their long legs can cover the ground is astonishing. Ostriches will easily outstrip a galloping horse, consequently the only way to approach them is by wile, al-

though I have been told that sometimes they can be worn down by persistent pursuit on horseback.

Of desert vegetation they seem to prefer a plant somewhat resembling a pumpkin, which creeps on the ground. On this they are fed chiefly at the ostrich farm, but, of course, an ostrich will eat almost anything, and I fancy their diet is not a matter needing much care and forethought. It is a curious fact that ostrich feathers are nearly as expensive in the French Soudan as they are in England. On several occasions I bought some, but they were so high in price as really hardly to be worth buying. The truth is that ostrich hunting in the Western Soudan is in such an undeveloped state that the natives who have feathers for sale ask fancy prices, and usually get them.

The ostrich farm near Niafounké is not well placed and the situation is certain soon to be changed.

My plans were now to try for lion along the banks of the Niger, near a place called Sébi, and afterwards to make for Saraere, where there was also the possibility of lion, and finally to march to Lake Bambara Maaundé, a fine hunting locality for elephant and several varieties of big game. Most of the inhabitants here are Fulanis, and their occupation is tending big herds of cattle. The country is thinly populated, and thus is well suited for game. A horse was essential for shooting, but I was unable to buy one, so had to be content for the present with hiring daily from village to village—a troublesome and unsatisfactory proceeding.

CHAPTER XV

Game on the Issa-Ber—Hiring a canoe—A leaky craft—Borgou grass—Fish tanks—Sebi—Tracks of lions—Good wildfowl shooting—Tortures of a native saddle—Mamadu's horsemanship—A flat country—Fulani villages—Saraféré—Desert winds—Niger canoes—Hardy hunters—Ancient fire-arms—Lion shooting—The Fulanis.

ON the 13th of March I left Gauba. For the first few miles our way lay through a swampy country, consisting of creeks and backwaters of the Niger, or to be more accurate, of the Issa-Ber. Hundreds of waterfowl of all descriptions were preening their feathers in the morning sun, sitting in groups on the little islands in the middle of the streams or floating lazily near the banks, watching us with suspicious looks as we approached. Numerous game tracks led down to the water's edge, the footprints showing clearly in the soft soil. Waterbuck and kob appeared to frequent these haunts in the early morning, while wart-hog were very common. Allowing my carriers to go on, I was able to secure some good specimens without proceeding far into the bush on the higher ground to the west of our road.

On arriving at the village of Sibo I was told that further progress by road was impossible, as the floods had been high that year and the track was still under water. The only course to adopt was to go by canoe. Hiring a canoe or any business transaction is always a lengthy proceeding where the West African native is concerned. The chief of the place had first to be summoned, and, of course, was not to be found for some time. The virtue of patience is,

indeed, a golden one to possess in this land. The native's methods are invariably dilatory since time has no value for him. But it is easy to preach patience and a great deal harder to practise it when one is in a hurry to get things done. In this case I was kept waiting a couple of hours before the chief arrived. The policeman provided by the Commissioner at Niafounké had unfortunately not yet reached me, but was to do so during the course of that morning. When the chief had arrived a considerable discussion took place between his insubordinate followers as to which one should supply the craft, until I cut matters short by securing the best canoe I could find and telling the chief I would send him back to Niafounké with a message to the Commissioner unless the paddlers were forthcoming within half an hour. Matters were at length settled, and my few belongings quickly stowed on board.

Mamadu had secured a large earthenware pot, a very necessary article for culinary purposes in a wooden canoe, as the fire had to be lighted in this receptacle, and we were just shoving-off when the policeman cantered up on his steed. As it was not possible to take this beast on the canoe it had to be left at the village.

The canoe was about twenty feet long, leaked considerably and had no awning, so I looked forward to a hot and uncomfortable journey. My expectations were fully realized. In spite of two men being constantly on duty to bale out, we made so much water that at one time I feared we would have to run ashore and patch her up before the voyage could be continued. The sun, too, was very trying that day. It poured its rays mercilessly upon our heads until at last I was driven to take refuge, in a rather ignominious fashion, by lying at full length on my back, and placing my camp-table across two seats I was able to get a little welcome shade underneath it. The chief discomfort of my position was due to the water at

the bottom of the boat, so that I was immersed in a perpetual bath.

We were now in the Issa-Ber. The banks were sandy, and scrub was scanty and stunted. The river is nearly a mile wide in many places, and frequently too deep for poling to be effective. These canoes are manipulated in two ways, either by paddles or poles. The canoemen are expert at both these methods, but, owing to the strong wind which is so prevalent, it is often hard work to make much progress with paddles. The poles are merely long bamboos or palm stalks, and with these the craft can be propelled in the shallower water near the banks. When poling, we constantly found further progress barred by thick masses of " borgou " grass. This grass has its roots often twelve or fifteen feet deep in the water; it grows so densely that it makes a thick matting from the surface of the water downwards, through which it is extremely difficult to penetrate. The appearance is somewhat similar to " sudd," found on other rivers in the tropics; and in many of the streams where navigation is not frequent the whole channel is blocked, so that the only successful means of dealing with it would appear to be to have a small steamer fitted with a cutting apparatus to hew a channel for itself as it moves through the water.

My servant could not speak Fulani or Sonrhai, the two languages now required, so I found the policeman doubly useful; indeed, without him it would have been hard to get anything done.

In several places we saw fish tanks, made on the edge of the river banks, where the " borgou " was clearer or had been cut away by the natives. Fish were first caught in traps or nets and then stored in the tank alive. The river-side people are great consumers of dried fish, live ones being taken out of the tanks as requirements dictated, to be dried for local consumption or for trade at neighbouring

inland markets. At the time these fish were being dried on the river banks the stench proceeding from them was most unpleasant, making it necessary to give the shore a wide berth.

My recollections of Sébi are that it was one of the hottest and dirtiest villages of the Western Soudan. I camped on the eastern side of the town, but had occasion to enter it several times during my stay in the place. The chief provided me with two hunters, who could give me no immediate information of lion. There was no doubt, however, that I was as likely to see them here as anywhere, for the record of cows and sheep killed in this locality by "the king of beasts" was far higher than anywhere else in the "Bend." A week before my arrival there had been a kill, and it was quite likely that lion would soon revisit this happy hunting-ground. The local herdsmen were told to send me immediate news of any signs of the presence of lion which might be observed near their flocks; one hunter was sent to seek for fresh tracks near the river, south of the town, while I and the other hunter went off next morning to a likely haunt to the north.

Three days brought no information of lion in the vicinity, but that they had recently been there was certain, for I came across tracks, varying from a week to a fortnight in age, of three different animals within ten miles of the town. I have not the slightest doubt that had I not been so pressed for time, and been able to prolong my stay for a week or two, I would have been certain to get at least one. Knowing, however, that I should probably get a chance soon, for all the country in the "Bend" is fairly plentiful in lion, I made preparations for my departure to Saraféré. My stay at Sébi had not been unproductive, as I had shot a nice kob and a red-fronted gazelle, which in size was within an eighth of an inch of the record, besides several smaller heads of different varieties.

At Sébi there was quite the best duck, geese and teal shooting I found anywhere on the Niger. At the back of the town there were several large ponds and marshy rivulets in which swarms of birds were always to be seen, while at night, about sunset, the waterfowl could be shot flighting between the Niger and these places. Each evening I went out with my shot-gun, and had some capital sport on every occasion. Just when the light was getting dim the noise of the whir of many wings would be heard in the air, when, on looking up, a cloud of dusky objects might be seen approaching phantom-like in the sky. The first shot would cause them to swerve, passing away out of shot, but behind were line upon line of serried ranks, all directing their flight towards the same objective, unaware of the danger below them, until they heard the report of a gun and, perhaps, saw one of their number fall to the ground. Quite apart from lion or other big game, Sébi was decidedly worth a visit for the sport of its wildfowl shooting.

From Sébi I was told that my shortest way was by canoe, but I did not place much confidence in my information, for the water in the small creeks, by which I must travel, was subsiding so rapidly that it seemed highly probable I should find myself stranded before I had gone very far on my journey. Besides, I was anxious to see more of the country, and this could best be done on horseback. I had brought no such luxury as an English saddle and bridle on my expedition, so I had to get accustomed to the native horse equipment. To anyone who wishes to try it I say most advisedly, "Don't." Of course, one can get used to anything, but the tortures suffered in accustoming oneself to a native saddle in the Western Soudan are such that the game is decidedly not worth the candle. By perseverance, and with the loss of a good deal of temper, I did get used to the thing eventually, only, many was the time

I groaned at the thought of another day in that saddle and prayed even for the roughest of English-made saddles.

The native saddle is made entirely of wood ; even if the wood were well-planed and with a level surface it would be endurable, but the wood is roughly hewn and appears to be fashioned in a series of little hills and dales, which are most fiendish contrivances for a person only possessed of normal skin. To add to the discomfort the saddle is seldom made out of one piece of wood, but the seat consists of two or three planks which frequently do not fit over-well against each other. A blanket thrown across it can do something to alleviate one's miseries, but at the best it is a poor remedy, and a very hot one.

Mamadu was very anxious to ride, so I let him hire a horse too. His horsemanship was very inferior, however, and after several differences of opinion between himself and his mount, ending invariably in his discomfiture, he came to the conclusion that he preferred walking. Mamadu certainly did cut a strange figure on a horse, his appearance causing much merriment to the whole party. At this time he had, from somewhere or other, unearthed a long, black coat, which had seen better days and was now very threadbare. This garment covered his white coat, coming halfway down his white baggy trousers as well. His head was adorned by a native sun-hat, a conical affair, gaily decorated with coloured leather ribbons. On horseback his appearance was even more ludicrous than it was on foot, and when he used to prepare to mount he was greeted with loud yells of derision from the carriers, who considered him fair game for a jest. Poor Mamadu, his troubles were great in those days, and I am afraid I did not feel as much sympathy for him as I perhaps should have done.

I used to ride on with the policeman in the morning, ahead of the carriers, the policeman carrying my shot-gun,

while I had my rifle slung over my shoulder. In this way one could get a good deal of sport on the road. On observing any game I would dismount, leaving my horse with the policeman, and was then free to stalk at my leisure. The country was very open, with no other trees than stunted dum palms, and sandy soil. For miles upon miles it was a flat plain, watered with numerous shallow, slowly flowing streams, which fertilized the country between the rivers Issa-ber and Bara-Issa, and connected those two main waterways.

The track was ill-defined, so that I found it necessary to take a guide from village to village. Cattle-tracks crossed and recrossed our path in every direction, in many cases completely obliterating all signs of the way we were endeavouring to follow. Moreover, wide detours had constantly to be made to avoid inundations, of which only the nearest villages were aware. These inundations were very deceptive. Some were fordable, but others had a treacherous quagmire under the surface of the water, from which it would be no easy matter to extricate oneself. On approaching these inundated areas we would disturb big flocks of teal, which had been hidden in the rushes, and now circled high over our heads waiting for our departure to settle down once more in their accustomed haunts.

The villages were all Fulani. These people, although in many ways superior to the other inhabitants of the Western Soudan, live in far inferior houses. When approaching a place a glance will be sufficient to tell if it is inhabited by Fulanis. Their huts are most primitive and flimsy affairs. They are built of plaited straw, which is the stalk of the rice or millet plant. There is only one layer of this straw, so that sun or rain can penetrate with ease.

These huts are very low, there being only just room for a man to stand upright in the centre. At one end is a

couch, made of a few layers of sticks and raised two feet off the ground. The couch is generally covered with grass mats and tanned sheepskins. The entrance is by an opening barely three feet high, while, if the ground is rough, it is usually covered with more grass mats. Fulani villages are very dirty. The people live with their cattle around them. In the daytime the young calves are to be seen tied up to a stake at the front door, to prevent their following their mothers, which are sent out to graze with the rest of the herd. At sunset the whole troop return, when the village resounds with their lowing and bellowing. When green fodder is dried up the cattle are fed on the same straw of which the huts are made.

In all this country supplies are wonderfully plentiful and cheap. Fowls can be bought for 15 cts.; eggs cost 10 cts. for four; milk is about a halfpenny a quart; and a bullock can be bought for 20 francs. For this reason living is as inexpensive as anywhere in the world, I should think, so long as the traveller lives on local produce. Freight from the coast is so high, however, that European stores are most expensive. Between Niafounké and Timbuctu the French reckon that a loaf of bread, baked with French flour, costs them 1 franc 50 cts. The French being great eaters of bread grumble greatly at the cost of flour in those parts.

Five miles from Saraféré we had to cross a wide swamp by canoe. On the other side of this water was a fair road, coming from the west; this was the road from Niafounké to Saraféré, and this we now followed till the town was reached.

Saraféré lies on the opposite shore of the River Bara-Issa, which here is a couple of hundred yards wide. The river twists and winds around the town in a curious manner, describing a curve resembling the letter "W." As the crow flies the distance between the outer bends of the

" W " cannot be more than a couple of hundred yards, but by the river it must be fully five miles. The town itself consists of a strange collection of mud-built houses, of rather Moorish appearance. The streets are quaint, narrow alleys, winding in an aimless fashion through the place. All the houses have flat roofs, upon which the better-class citizens take the evening air.

Saraféré is called the Sister of Timbuctu, owing to the similarity existing between the two towns. The inhabitants are mostly Sonrhais, but the place is divided into quarters for Arabs, Fulanis, Bambaras, Bosos and Tuaregs, all of which races are fairly well represented. Besides all these permanent residents there is a floating population of traders from all parts of Western Soudan. Mossis from the south bring native cloths and kola nuts, chiefly the product of the big market of Wagadugu. Moors and Tuaregs bring salt and gum from the desert regions in the north. Sonrhais from Djenné take spice and native peppers to Saraféré market, while Hausas from Kano, to the east, bring beads, sham pearls and Kano leather wares. This mixture of different races, talking different languages, makes Saraféré market-place an interesting scene to the European visitor.

The Resident's house and those of the two French merchants face the river, occupying a large space in front of the town. Here one gets a foretaste of the desert winds. Clouds of sand envelop the town during the months of March, April and May, making existence anything but pleasant while the wind is blowing. The sand permeates every nook and cranny of a house. The only thing to do is to shut all doors and windows, enduring the heat in preference to being buried in sand. The soil on the immediate banks of the river is capable of producing good rice and millet, but away from the water it is poor and desert-like. Long stretches of sand, with only here and

there a few dried-up shrubs or tufts of coarse grass, characterize this rather forbidding-looking land.

The Sahara has, indeed, invaded the right bank of the Niger, not content with the havoc it has wrought along the left bank of the river. Much of the country in the "Bend" bids fair to develop into desert in the course of time unless these terrible winds can be checked. Nature opposes no obstacle to them, as the land is so flat, almost uninterruptedly from the southern slopes of the Atlas Mountains across the whole of this portion of Northern Africa. But I am rather digressing, for that part of my story belongs really to the description of the country near Timbuctu and the other side of the Niger.

There are two kinds of canoes on the Niger, the "Djenné" and the "Niger" canoe. While I was at Saraféré I had ample opportunity for watching the building of the latter kind of craft. The whole material for the canoe is produced from the dum palm. It is interesting to observe the uses the different portions of that tree can be put to in the manufacture of a canoe. As the dum palm is practically the only tree found in the country it is fortunate for the natives that it has so many varied uses.

A canoe made of this palm cannot be constructed out of one piece, as a dug-out is hewn from a single tree trunk. This is not possible, because the trunk of the dum palm is of small diameter, and several trees must be utilized to make a single canoe. Most canoes are made of six separate portions of the wood, sewn together, but of course, the number of pieces required varies with the size of the craft to be built. The first operation is roughly to hew the different parts of the frame into the required shape. The tools used are an instrument resembling a chisel and an iron-headed hammer. These tools are of native make, forged roughly by a native blacksmith, so hardly the most suitable for the work they are required to perform. How-

ever, the result is not by any means bad, doing great credit to the skill of the workmen. When the portions of the body have been shaped, they are placed together, being kept in position by logs of wood propped against them. The next operation is to sew these portions together. Holes are punched with a sharp-pointed instrument through the pieces near their edges, the local rope being used to bind the parts together by threading it through these holes.

The local rope is made out of strips of the stalk of the palm leaf. These strips are plaited together until they form a kind of withy, which is exceedingly strong and durable. The holes in the frame are stopped up by taking as many turns of rope as possible through them, but of necessity there is plenty of space left between the stitches for water to leak through.

The next item is to stop these holes more effectively, for it would be impossible to remain long in the water in a canoe which leaked so badly as the unfinished article now would do. For this purpose the leaves themselves of the palm trees are utilized. These leaves are very fibrous in texture. This fibre is pounded up until it becomes a stringy, yellowish mass, quite soft and easily manipulated. Small bits of this stuff are poked into all existing crevices until no gaps are discernible. It only now remains to smooth off the rough surfaces of the canoe, and to put in seats, etc. Even the best canoes leak a great deal, but a constant supply of the fibre referred to is kept on board for the purpose of stopping the more serious leaks, and a man is frequently engaged in baling out. These canoes rarely last more than one year, but building is so simple and all materials so near to hand that there is no great difficulty in building new ones.

The "Djenné" canoe is more elegantly shaped and much better finished. There is no mistaking a "Djenné" canoe when seen on the river In actual construction the

BAMBARRA HUNTERS IN THE "BEND" OF THE NIGER

These men were my native trackers when I was hunting big game in the Middle Niger Basin. The picturesque figure in the centre is a splendid specimen of the Bambarra race. The horns strung round his middle are not powder-flasks, but charms, to each of which some particular virtue is supposed to attach, for these people are steeped in superstition.

only difference is that the Djenné people use wooden pegs to connect the separate parts of the body together instead of sewing them. Canoes sixty feet long are frequently seen on the Niger. They usually belong to a native trader, or to a rich chief. They invariably are covered over with native mats, forming an awning as a shelter from the weather. The native canoe is of very shallow draught. I doubt if it draws more than three inches. All the river people are expert paddlers and polers. They will, if necessary, travel day and night without more than three hours' halt in the twenty-four, and will keep this up for five or six days continuously. Canoes trade for long distances on the Niger. They frequently ply between Timbuctu and Koulikoro, a distance of nearly 600 miles. The Saraféré canoes usually trade only with Timbuctu to the north, or Djenné to the south. While I was at Saraféré several canoes came from Djenné bringing traders with the produce of their country. The water in the river towards Timbuctu happened to be rather low at the time I was at Saraféré, so only small canoes were trading between the two towns.

The women of the place fashion clay pots out of the mud found on the banks of the Bara-Issa. These pots are very simple in design, but are useful as water coolers.

The finest men found in this country are certainly the hunters. They are brawny fellows, of fine stature and hard muscles. Their eyes are keen through long practice in following game, while their powers of tracking are undeniable. In the course of my hunting expeditions I came in contact with a good many of them, and one could not but admire their strength and endurance. The hunters are nearly all Bambaras, living in small groups in the different villages. They exist entirely by what they can shoot; although I must own that I was hardly impressed with their prowess with the gun. On one occasion I

recollect seeing my head hunter stalk a gazelle. I and the other hunters were spectators from the fringe of some bushes about two hundred yards away. The gazelle was quietly browsing in an open piece of ground with little available cover between it and its stalker. Nothing could exceed the skill with which he crossed the intervening ground unperceived, until he had taken up a position not ten yards from the animal, concealed by a friendly small shrub. It was really a fine piece of stalking; it seemed almost incredible that he could have approached so close unknown to his intended victim.

Breathlessly I watched the scene through my glasses, fully expecting that the unfortunate little animal would be blown to smithereens at such short range.

There was a deafening report, but when the smoke cleared I was astonished to see the gazelle bounding away at the top of its speed quite scathless!

The hunter did not appear to be much mortified by his failure, so I could only suppose it was not an unusual occurrence for game to be missed at such close range.

These hunters are all armed with old flint-lock guns, rather formidable-looking weapons, but often more dangerous to the owner than to the object fired at. They are five feet in length, with barrels made out of old gas-pipes or anything that comes handy. Missfires are frequent owing to indifferent powder, and the weapon has to be fired from the hip as the recoil is so violent. The guns are first loaded with a big charge of black powder, extending some inches up the barrel. A piece of old cloth is then rammed down to keep the powder in position. The shot comes next, consisting of a varied assortment of stones, bits of lead, scraps of iron, etc., the whole charge being rammed home with a piece of rag, and extending three-quarters of the way up the barrel. The tendency is for the missiles to fly high and scatter; but, if fairly aimed, the damage done

CANOES ON THE RIVER BARA-ISSA

Most of the inhabitants of the river-banks are occupied in trade with Timbuctu, Mopti, and Djenné, or else are fisherfolk ; consequently they spend a great portion of their lives in canoes. These canoes are roomy and provided with overhead shelters as a protection from the sun.

is considerable, as instead of inflicting a single wound, possibly some dozen pellets strike the victim.

It was while I was near Saraféré that I got my lion. One afternoon I heard news of a lion having been seen that morning, about fifteen miles from my camp. He had attacked a herd of Fulani cattle, making off with one of the cows.

I lost no time in setting out for the village nearest to the scene of the "kill." I rode off with a guide to show the way, leaving my kit to follow me the same evening. That night I camped at the village to which the cow belonged.

There seemed every prospect of my finding the lion the following morning, for he would probably despatch his meal in his lair hard by, and rest there to sleep off the effects for some hours.

Accompanied by my two hunters and a native who knew the spot, I set out before daylight. We had to cross a stream which lay between the village and the place where the cow had been killed. On the other side was a sandy scrub country, dotted about with the ever-present dum palms. These palms here grew in clumps, some of which were a hundred yards in diameter, but the palms themselves were more in the nature of bushes, and not more than twelve feet high. It was beginning to get light, but the undergrowth in these clumps was so thick that one could seldom see more than a few yards inside. These clumps were the lair of the lion, although it was not certain in which one he would then be found.

After tracking him from his "kill" for some distance, we discovered the place where he had dragged the remains of his victim. However, it was soon evident that he had since emerged from there, and we now followed his pug marks of that morning, clearly defined in the sandy soil. At last he was traced to a certain clump, thicker than the

rest, in which he certainly was lying. It being impossible to see inside, the only plan was to try to frighten the brute out. Accordingly I sent the beater and hunters to different points, where, at a given signal, they were to commence to shout and beat the bush with the object of driving him towards me. The ruse succeeded in causing him to bound out of his hiding-place, but unfortunately on the opposite side to me, so that I never saw him. I dashed round to the far side and just caught a glimpse of him disappearing towards another clump of palms.

Now ensued a curious race between us and the lion. I knew that, should I lose sight of him for long, he would probably give me the slip, for these beasts travel great distances when alarmed.

We accordingly pursued him at our best speed, until he was viewed disappearing into another clump. Again he got away before I had a chance of a shot. This race continued for another mile or so, when I was decidedly winded and the perspiration streaming off me. At last I came up with the beast, in a palm grove, and, cautiously following his tracks into the bush for a few paces, I suddenly saw him, in a more open spot than usual, about forty yards away.

He stood facing me, his splendid eyes glaring wickedly, while he lashed his tail and uttered some low roars.

Here was a fine opportunity; so, raising my ·450 rifle, I fired, and he dropped with a bullet through his head.

Keen as I was, I do not think I could have maintained the race much longer, for I was quite winded and had some difficulty in keeping my rifle steady as I fired; but the range was so close, and I could see him so distinctly, that the shot was an easy one.

The lion of this country is not a handsome creature. The colour is a pale tawny, and the animal is maneless. Moreover, it is my firm conviction that he is an arrant

coward. My own experience, and what the Fulani herdsmen have told me, both tend to support this idea. I have been told more than once of cases in which a lion had jumped on one of the herd with the intention of killing and carrying off its prey, but had been driven off by a single-handed Fulah armed merely with a stick. It seems rather ridiculous that a lion can be frightened off his victim, by thwacking him with a stick, but there is no doubt that it has been often done by these people.

The Fulanis hold the lion in contempt rather than in awe, and, I fancy, he only succeeds as a rule in securing his prey because the herds are too large for one man to supervise.

These Fulanis, whom one meets so often in the Western Soudan, are an interesting race of people.

They are certainly not of negro origin, for they have straight hair, aquiline features, thin lips, and pale reddish brown skins. There is a mystery about the land of their forefathers, but it cannot have been in Western Africa. Some people say they came originally from Egypt. To support this theory it is stated that the word "Fulah" is a corruption of the word "Felah" of Egypt. Their appearance is somewhat Egyptian also. On the other hand, it is not easy to trace a close connection between their language and customs and those of Egypt.

Many maintain that they came from the other side of the Red Sea. Their own version of their history is exceedingly vague. Anyhow, it seems clear that they came from the East, as they have left traces of their progress from the East to the West of Africa. They are far superior in intellect to the negro, having shown their superiority by conquering all with whom they have come in contact. They are essentially a pastoral people, whose chief object in life appears to be to excel in the size of their herds. Their dwelling-places are generally temporary ones, where

they stay as long as the pasturage is sufficient for their cattle. As soon as the grass gets poor they shift their dwellings to more favourable spots. The Fulah counts his wealth by his bulls and cows. All the money he makes is laid out in increasing his stock. He has a wonderful knowledge of cattle, and a marvellous power of calling to strayed animals. By uttering some weird low cry they can recall their beasts even from considerable distances.

Fulanis have made their way almost to the coast. They are found in many places in small colonies, generally forming the cattle-owning population of a place. The province of Futa-Jallon in French Guinea is inhabited by them, otherwise they have no big strongholds until the Middle Niger is reached. But from there to Northern Nigeria they are found in certain places in considerable numbers. Except for tending cattle they do no work themselves, being decidedly indolent. The housework and any farm work are entirely done by slaves, or servants. Slaves are well treated by them, and many slaves stay with their masters in serfdom in preference to taking their liberty, which they can do at any time they wish, by making a statement to this effect before a French Commissioner.

The Fulanis are all fervent Mohammedans. Wherever there are Fulanis there will be found a mosque. These people have shown themselves able administrators in the places which they governed before the advent of the white man. Their laws were just, while their method of appointing civil administrators to the various districts into which a country was subdivided was sound. It would be interesting to know more about the past of these people, and it is much to be hoped that further light may one day be thrown on their origin.

CHAPTER XVI

Land near the Bara-Issa—Tuaregs—A salt caravan—Stalking hartebeest—Lake Niangaye—The village of Kanioumé—My runaway horse—Tracking elephants—Elephants bathing—A stampede of elephants—A wounded elephant—Cave dwellers—Sandstorms and rifles.

ON the 21st of March I left Saraféré. I had managed to buy a horse here, being glad to have my own mount at last. He was a little animal, a dark bay, about fourteen hands; not exactly the most suitable beast for the work for which I required him, but horses were not easy to buy. In any case, the price could not be called exorbitant. I paid the sum of seventy-five francs, or three pounds, for him, the saddle and bridle included!

I still had to be content with a native saddle and bridle, for European horse-gear was not to be had in the Western Soudan. His previous owner was a native clerk in the Resident's office, who informed me that he was selling as he proposed closing his stables! Fortunately I was a light weight, and as he appeared to be a wiry little beggar in spite of his somewhat weedy looks, I came to the conclusion he would be good enough for what was expected of him. He was, of course, innocent of any knowledge of trotting. His only two paces were an amble and a walk. He could amble fast or he could amble slow, but had not much idea of galloping.

The country was very similar to that between Sébi and Saraféré. In the season of inundations it would not have been practicable to travel by road, as the existing track would have been several feet deep in water. The only mode

of transport then possible is by canoe. Rice and millet are the products of this country, the land near the streams and backwaters of the Bara-Issa being eminently suited to the cultivation of these cereals. On the banks of these streams are the villages, but as soon as one strikes into the interior, away from the water, the country becomes more than ever desert-like in character, and human habitations are confined to a few isolated Tuareg encampments. The people in the villages are Fulanis, as usual possessed of big herds of cattle. The Tuaregs, on the other hand, owned sheep and goats, which seemed to thrive in a marvellous manner on the poor provender found in the sandy waste surrounding them. A coarse-looking grass, or mimosa scrub, formed their fare.

These Tuaregs are hardly the same class of that tribe as are found in the desert proper on the other side of the Niger. They are nomads, preferring the isolated life away from villages, it is true, but at the same time they do not so utterly shun all contact with mankind as do their brethren of the Sahara. I suppose being nearer to civilization and luxuries, they have begun to feel the want of these things, and have to a certain extent degenerated. Anyway, they would appear to be now less hardy than before. Their dwelling-places consist either of small tents made of sheep-skins, or else of little huts made of branches of mimosa scrub and palm leaves. Hut is rather a dignified name to apply to these habitations. They are, perhaps, a dozen feet square, and so low that a man must always remain in a crouched position if he tries to stand up inside. It is strange how they succeed in getting their wives and families into this tiny space. Certainly their personal belongings are few, for they are very poor, and their wealth, such as it is, is all in their flocks of goats or sheep.

One day we met a large salt caravan coming down from Timbuctu, and *en route* to a place called Douentza, some

WOMEN POUNDING RICE AT TOMBOLA, FRENCH GUINEA

Rice is pounded in a wooden bowl with a heavy wooden club. The women spend hours daily in preparing the rice thus, chanting the while.

days' march south of Saraféré. The salt is carried in big rectangular bars, and, in this case, was laden on donkeys and bullocks. The loads are usually fastened into a kind of stout rope netting, like a bag. These nets are then fastened one on each side of the beast of burden, over a roughly shaped pack-saddle.

These traders were all Hausas, travelling with their wives and children. They cover about fifteen miles a day in this manner, and are so abstemious in their habits that they generally make a large profit on their transactions. They drink only water as a rule, while their diet is of the most frugal kind, helped out with a few kola nuts, of which they are exceedingly fond. The nut has rather a bitter taste, but one soon gets accustomed to it. The Hausas can exist without food for a considerable time, provided they have some kola nut to chew. There is no doubt that its sustaining properties are great, while, when water has been scarce, I have found it a first-rate plan to keep a piece of the fruit in one's mouth and close the teeth on it.

The head of this caravan was a native merchant of some importance. Early next morning we saw him on the road preparing to start. He wore flowing white robes, and made a picturesque figure mounted on his gaily caparisoned steed. I was informed he was a regular trader by that route, and that he always personally superintended the assembly of his caravan before the morning departure. He certainly seemed to have a rather motley collection of both sexes who were under him in perfect control. At his orders they sought out, without much delay, their respective beasts from the grass where they were browsing, and loaded their charges in a most business-like manner.

This place, called Bouramaka-Yororo, was one of the few spots where I saw any full snipe. About two miles' walk from the village there were some shallow ponds, with marshy banks, which were the homes of these snipe,

besides quantities of the grey teal, which I previously described. Most of the different kinds of duck, which I had come across before, were also well represented, but in comparison to the grey teal their numbers were insignificant. The water was covered with a grey sheet of these little birds, but they were very wild, and rose in the air in dense clouds on observing our approach.

The next day we had a long march, through a very sandy region, to the western extremity of Lake Niangaye. We had now left the water system of the River Bara-Issa behind us, and the country was destitute of water until the lake was reached.

I was riding ahead of the carriers with the policeman, as my custom was, when, as we came round a bend in the track, we espied a big herd of Senegal haartebeest. The animals had evidently been down towards the lake, and on perceiving us, galloped off through the scrub to our right front. There were at least forty in the herd, and, in the hopes that they had not gone too far for pursuit, I started off on their tracks. The trail was easy enough to follow, so, leaving the police orderly with our horses, I went off alone. The ground sloped gently in front of me, so I cautiously approached the top, expecting to see the antelope grazing on the far side. Working with the wind in my face, I wended my way gradually to the ridge, and, taking cover behind a mimosa tree, I peered warily over the edge. Sure enough, about eight hundred yards away were the herd, some grazing, while others had their heads turned in the direction from which they had come, evidently not forgetful of the alarm our appearance had caused among them.

I now tried to stalk them by a flank movement, making for a hillock within two hundred yards of the game. Here I hoped to be able to select the best head, and should be within fairly good range. My manœuvring was com-

pletely successful until I neared the top of the hillock, and then, by an incautious movement, I foolishly exposed myself to view for a fraction of a second. To my disgust I had been observed, and away scampered the whole herd at a pace which I knew meant that pursuit was out of the question. I took a couple of flying shots at the one I had marked down as being the biggest bull, but they were both clean misses, and I was unable to retrieve the blunder I had made by exposing myself to view. I only saw one herd of these haartebeest as big as this one again. I fancy forty animals in a herd is nothing out of the ordinary, but in the Western Soudan, from my experience, they are generally in much smaller herds.

After the incident of the haartebeest we continued our march towards the lake. The carriers had by this time come up with me, and were eager to get to the water, as the day was hot and they had nothing to drink by the way. Accordingly we pushed on at a good pace, until suddenly a silvery gleam came into view on the horizon, being evidently the first glimpse of Niangaye. As we approached the water became more visible. Here we were near the western extremity of the lake, which extended eastward as far as the eye could reach, while the breadth must have been about three miles. The shores were sandy, and the banks covered with dried-up grass and small bushes. Occasionally a canoe could be seen speeding along under sail, propelled by a stiff breeze from the north-east. The water was a fine open expanse ; there were a few clumps of reeds at times near the shores, but these were not dense enough to interfere with navigation.

The wind referred to blows almost constantly from the same quarter. It is strongest from about sunrise till 11 a.m., while in the evening it dies down altogether as a rule. It thus causes a regular tide, with a difference between high and low water of about two feet. As the

lake is shallow, the bed shelving very gently, there is a considerable difference between the width of the sandy beach available as a road in the morning and afternoon. The quantity of water in the lake varies greatly with the season of the year; indeed, at the end of the dry weather, about May, it is possible to walk across the lake in several places without so much as wetting the feet.

Lake Niangaye is one of the largest, if not quite the largest, of a system of lakes and backwaters of the Niger and its affluents in the south-west corner of the "Bend" of that river. Lake Niangaye is the most easterly of this system. The whole of this large area is known as the "Lake District," and all round these waters game of all descriptions abounds. During the season when water is abundant everywhere the game has no difficulty about drinking; it is therefore scattered all over this area, and not so easy to locate. In the dry months, from January to May, however, the case is very different. Water gets scarcer every month, and the drinking-places become more and more restricted, so that the game has to concentrate around the immediate shores of the lakes to get water. Consequently this is the best time of the year for shooting, although one disadvantage is that the heat gets very intense, and, under these conditions, tracking game becomes a very exhausting pastime. The sandy soil surrounding the lakes for many miles scorches the feet, while the sun beats mercilessly down upon the sportsman's head. Of course, many kinds of animals retire when the sun gets up in the heavens, about nine o'clock; but this is often the best time to find such game as Senegal haartebeest and gazelle, which can be discovered resting from the heat of the day in the shade of a mimosa tree. These animals are sometimes very shy and unapproachable in the early morning or evening, and frequently one's only chance of a shot at a beast you have been tracking for some time is

FULANIS AT BAMBARA-MAAUNDÉE

These people, living, as they do, in the northern portion of the higher "Bend," where the Sahara sand has crossed the river and made a determined invasion on the right bank, have adopted the Tuareg "litham." They are skilled horsemen and experienced cattle-breeders. The national arm is the spear, such as is held by one of the squatting figures.

during the middle of the day, when he is not so much on the alert.

The village we entered near the western end of the lake was called Kanioumé. I was particularly anxious to stop a few hours here, in order to interview the chief. He was the most influential man in this region, all the villages on the southern shore of Niangaye being subservient to him. This man was a Fulah, and as he had had constant dealings with the Commissioner of the district, on account of his influential position in the country, I had been recommended to make arrangements for local hunters, supplies, and so forth through him. I had been given the names of the best hunters in the district, and was told that this chief would be able to furnish me with them.

The chief was most obliging, providing me with everything I required without delay ; but the hunters were not forthcoming. They were, he said, at Douentza, several days' march away, and the head-quarters of the French Resident. Fortunately, I had taken the precaution, before leaving Saraféré, to write to the Resident of Douentza, informing him of my intended hunting trip in his country, and at the same time mentioning that I wished for the services of these particular hunters. I therefore hoped that they would soon reach me. This chief informed me, and I subsequently discovered that his statement was perfectly correct, that there were practically no native hunters in the region. It appeared that the Fulanis, who formed almost the entire population of this part of the Lake District, never themselves hunted, hence the difficulty of securing a man who knew the haunts of the game in the neighbourhood was great. It seems strange that these people, living in the midst of a country inhabited by wild animals, should not care to hunt them, but so it is The chief, however, relieved my worst apprehensions to a certain extent by assuring me that at Bambara-Maaundé

there was one hunter ; I therefore bade him send at once to the man to tell him to be ready to meet me there the next day. At the end of the palaver I rejoiced the chief's heart with a present of a head of tobacco from my now dwindling store of the leaf.

The chief and a cavalcade of his retinue accompanied me as far as the next village, some six miles further along the lake, where I was going to spend the night. Having made all arrangements for our comfort there, he took his departure.

After leaving Kanioumé the lake widens considerably. The opposite shore cannot be seen until within about three miles of the eastern extremity. The total length of Niangaye is about thirty-five miles. Near Bambara-Maaundé the eastern end is divided into two forks by a high ridge of hills, the width of the neck of land at the foot of these hills and separating the two forks of water being about five miles. The southern shore is much more wooded than the northern shore, but even on the south there are frequently stretches of sandy country without any vegetation other than a coarse grass. The northern shore is also covered in many places with dense reeds, making navigation more difficult. On both sides of the lake the ground rises rather rapidly, until a plateau, two to three hundred feet above the level of the water, is reached. Most of the game is on this plateau on the southern side of Niangaye, merely coming down daily to drink.

For a few days I made Bambara-Maaundé my headquarters, leaving camp early every morning and returning at midday, then going out again in the afternoon. I found the hunter, who had been ordered to be ready at the village, awaiting my arrival. So far there was no news from Douentza of the two hunters I had sent for, so I sent another urgent runner to the Resident for them. The day after my arrival I shot a fine Senegal haartebeest, within

two hours of camp, and this was the occasion when I lost my horse temporarily.

I had ridden out with the hunter, as was my custom, when we got on to the tracks of a fine solitary bull haartebeest. I dismounted to follow it on foot, leaving the horse with the hunter and my second rifle-bearer. I soon perceived him about six hundred yards away, browsing at the top of a little rise. The ground was very open and sloped up gradually towards him, so I had to be very cautious in stalking. Fortune favoured me this time, and I was able to get within comfortable shot, unperceived. The first bullet dropped him, mortally wounded through the lungs. My hunter came up with the horses. These he tied up while we were skinning the animal, having secured the end of my horse's bridle to the branch of a mimosa tree.

We were busily engaged with our hunting knives when I suddenly looked up and saw my steed, having slipped his head-collar, trotting quietly down the hill. He gradually increased his pace to a gallop before we had time to stop him, until he was lost to view. I sent the rifle-bearer after in pursuit, thinking he would catch him grazing quietly at the nearest spot, where he could find some good grass. To cut a long story short, the native lost the horse's tracks on some hard, rocky ground, returning about two hours later with the news. There was nothing for it but to walk back to camp and send out parties to search for my mount, if he had not returned, as I hoped, to the village. He was not at the camp, whither I returned ignominiously on foot, so I told the chief to send out search parties.

All available horses were collected to mount the tracking party, and when the men were assembled they were really rather a picturesque group. The Fulah on horseback looks quite his best, for these men have a good seat and are good horsemen, but, like most natives, they are bad horse-masters. There was a collection of some twenty men,

armed with the national weapon, a spear, looking more as if they were going out to fight than to look for a lost horse.

It was not till long after nightfall that I heard a great stir outside, and, by the light of a bright moon, I could perceive mounted figures rapidly approaching across the plain. On they came at full gallop, brandishing their spears and uttering wild cries, until they arrived opposite my camp, when they drew rein so suddenly as to throw their steeds on to their haunches. By the triumphant cries I guessed the horse had been found, as, indeed, he had. I think he must have lost himself, as, when they discovered him, he was lying down, tired out, and apparently only too glad to be caught and led back to camp.

After a few days' good sport, but still without news of the Douentza hunters, I determined to wait no longer, but to start for the elephant country with my local hunter at once. My so-called hunter was really not of much use, except as a guide to show me the road home at the end of the day, for his knowledge of the whereabouts of game was decidedly limited. He was also hardly an experienced tracker, but still, in this respect he might have been worse. In these circumstances I had to go and ascertain the place where the elephant were now to be found for myself, before I could decide where to pitch my camp. On one of my shooting trips I had come across some old spoor, leading down to the lake. I now went to this place with a view to making it the base of my tracking operations, intending to work backwards from there, in order to try to find the feeding-grounds of this herd. All this country is so thinly populated that for miles there are no habitations, and therefore I could not expect to get any information from natives.

That day I camped temporarily close to the place where these old tracks existed, near the brink of Niangaye. It was here that fortune smiled upon me for a change. That

evening, just I was retiring for the night, I heard a low thundering noise, and noticed the peculiar strong odour which is found with elephants. I at once came to the conclusion that they must be coming down to bathe at the lake, and, moreover, could not be far off. Hastily seizing my rifle and throwing on some khaki clothes over my light-coloured pyjamas, I went out of my tent at the same instant that the local hunter came to tell me the elephant were indeed approaching the lake. It was a beautiful moonlight night, and the animals sounded so near that I was afraid they would see the camp and take alarm, so I gave instructions for everyone to keep perfectly quiet and for the fires to be put out. It did, indeed, seem a strange thing that they should almost run into my camp the night I arrived there!

As I cautiously crept through the light bush, making a wide circuit to avoid giving them my wind, I shall never forget the splendid sight that broke on my view. In front of me was a herd of some forty elephants, drinking and bathing in the water of the lake. A bright moon shed her rays on the scene, making the water sparkle in a silvery sheen, while thousands of stars twinkled in the deep blue sky overhead. These splendid creatures appeared to be thoroughly enjoying themselves, and I waited under cover to feast my eyes on the sight for a few seconds. I could see them revelling in the luxury of their bath, douching themselves with water taken up in their trunks, splashing and disporting themselves in high frolic.

At this moment how I longed to be able to take a photograph of this remarkable scene, of which, though it is so vividly pictured on my memory, I have no other record!

I carefully singled out the best tuskers and waited my opportunity for a shot. To advance any further would have been fatal, for I was now on the edge of the scrub,

and between me and the elephant was a narrow strip of open sandy beach, while they were some thirty yards further in the water, possibly altogether eighty yards from me.

Having drunk their fill, the great beasts proceeded to retreat leisurely homewards. Now would be my opportunity for a shot. Manœuvring to keep the best tuskers in view, I had no difficulty in shooting down one as he stopped, within twenty yards of me, while he reached at a branch with his great trunk. I hit him through the ear in the brain, and he fell on the spot. At the same instant I saw the other tusker close at hand, and gave him two bullets in rapid succession. He was hard hit, but did not fall. The whole occurrence had not taken more than a few seconds, but before I had time to reload the noise was deafening.

The huge herd, evidently more frightened than enraged, except perhaps for the wounded elephant, by the report of my rifle and the fall of their comrade, stampeded. They charged violently forward in all directions, trampling under foot all that came in their way, screaming and trumpeting as they went.

Some half-dozen came careering towards me; there was neither time nor space to evade them, and I must own my life seemed not worth a minute's purchase just then. I thought I must inevitably be crushed to atoms under their massive feet; there seemed no chance of escape. In the hope of making myself as inconspicuous as possible, I flung myself flat on the ground, knowing all the time that though they might not notice me in their impetuous flight, those gigantic forms could hardly avoid running over my prostrate body.

By great good fortune something, I cannot for the life of me think what it was, made them swerve aside, passing within a few inches of me where I lay. I can hardly

describe what a tiny, impotent creature one feels at such a moment. How powerless was I against one of these animals, should he by chance brush against me! I suppose that is about the narrowest escape I ever had, and an experience I am not anxious to repeat.

In an incredibly short space of time the whole herd had disappeared, the only sign of their recent visit being the clouds of dust, the trampled soil, and the dead elephant.

While this scene had been going on the hunter, my servant, and my following had bolted in all directions, alarmed, I suppose, lest the elephants should rush through the camp. When quiet had been restored the natives began to return. The excitement had been rather trying, and there was nothing further to be done that night. I gave orders for an early start in the morning in pursuit of the wounded elephant, while the men left in camp were to cut up the dead animal.

Accompanied by the hunter I started before daylight, following the tracks which were fairly visible. The wounded animal had kept company with the rest of the herd, for, within a mile or two of camp, all the separated tracks of the scattered elephants reunited. As the day dawned it became clear from the blood that he had been severely wounded. I thought that the first shot had hit him in the head, and the second a little below the heart as he turned broadside to me, but of this I could not be sure. We were able to follow the tracks at a gentle amble, so distinct were they. After proceeding thus for about seven miles, we arrived at the top of the rising ground and on to the plateau, which I have previously mentioned. The scrub now got thicker, but there was no difficulty in riding anywhere. Proceeding another five miles or so, we suddenly came across the wounded elephant standing under a small tree, sheltering from the sun, for it was getting hot and was now nine o'clock. There had been

nothing to indicate that his footsteps were lagging. However, he must have got tired and been unable to keep up with the rest of the herd any longer.

The hunter was carrying my big rifle at this time, while I had the ·303 slung at my saddle. Seizing the ·450 from him I rapidly dismounted, while all this time the elephant appeared not to have noticed us, having its back turned in our direction. I skirted through the bush in order to get a shot at its brain, the animal being, I suppose, not more than thirty yards away. As I faced it it suddenly perceived me and lifted up its trunk as if to charge; I was then not twenty yards off. I fired under its uplifted trunk, when it swerved aside, the blood streaming from its mouth. A second shot penetrated its brain, and it fell to the ground quite dead.

The tusks of this elephant weighed fifty-two pounds each, while the other had ivory weighing just over forty-five pounds on either side. The ivory was not big, but I was given to understand that, for that country, the tusks were very fair, and that it was rare to get tusks weighing even sixty pounds; so under the circumstances I was fortunate.

It is a curious fact that the elephant of this region do not carry big ivory, although possibly the explanation is a simple one. There are no big trees in the country, which is an extraordinarily open one for elephant, consisting of sandy soil, light scrub and, in places, mimosa or other trees never more than thirty or forty feet high. Such is the district in which these animals are here found; besides, water is scarce. Away from the lake there is no water of any description for nearly forty miles.

Having found the line of retreat of the elephant, and knowing that it lay through a waterless tract of country, I decided to provision myself with water next day and attempt to come up with the herd again. Accordingly, the following morning very early, equipped with three

days' water supply, I set out in pursuit of the herd. It seemed evident that they must have a permanent feeding-ground, which could supply them with better provender than was obtainable in the country I had seen, and the chances were that if I could discover this feeding-ground I should also find the elephant. The tracks were plainly discernible nearly the whole way; only once did we lose them for a short time on some stony ground. Proceeding for about six miles beyond the place where I had found the wounded elephant, I noticed the country becoming much more wooded. We were now about eighteen miles from Lake Niangaye. Here the tracks of the elephant branched off in various directions, and it was without doubt their feeding-ground.

Picking up the biggest tracks we could see, we followed these for some distance through this wooded region. The ground here was quite rocky in many places, the sandy soil having disappeared. I had noticed that the ivory of my tusks was chipped, and it seemed that this must be the solution. Probably these elephant broke their tusks on the hard, rocky surface of their feeding-place. This wooded country appeared to extend for a considerable distance in a southerly direction.

Still following the tracks of this animal, which led to a place where he had evidently slept the previous night, we suddenly crossed some perfectly fresh tracks of another elephant. It was some hours later, when following this elephant, which I had wounded, that I came across a strange tribe of people who dwell in caves. The elephant's tracks had led me to the foot of the Hombori Mountains, and it is here that these people live. They wear practically no clothing, and are very timid. Probably they had hardly seen a white man in those parts before. They are called the Habbés. They live chiefly by hunting round the shores of a lake called Kurorua, lying at the foot of the hills.

I could not understand their language, and being short of provisions I had to curtail my stay in their country. This place is about forty miles from Lake Niangaye, and it seemed that the elephant used to drink at one or other of these lakes, according to circumstances, their feeding-ground being nearly half-way between the two.

The Habbés use bows and arrows, but also have old-fashioned guns, for which they manufacture their own powder out of saltpetre, found locally. Their bullets are more often made of small, sharp stones than of lead, but any rough missile will serve them.

Between the feeding-ground, which I discovered was called Tinsida, and Lake Kurorua, the country again becomes sandy and sparsely covered with vegetation. In all this sandy country the violent wind from the north-east, which I had experienced at Niangaye, blows. This wind raises sandstorms, which are not only most disagreeable, but are also very bad for the mechanism of a rifle should it be at all complicated. However careful one may be it is exceedingly difficult to avoid getting sand into the breech, with the result that a jam may occur. This actually happened to me at a very awkward moment, when hunting elephant. I had to abandon my ·450 and fire with my ·303. Fortunately for me the animal did not charge home, or I should probably have had some difficulty in stopping him with the light bullet of the small rifle. This was not the only occasion when I had a bad jam on account of the sand, and, later on, when crossing the Sahara, I found matters still worse, as the sandstorms were more frequent and more violent.

CHAPTER XVII

Bullocks—Pelicans on Lake Niangaye—Stalking ostriches—Friendly Tuaregs—Lakes and swamps—By canoe to Timbuctu—An intricate route—Horses of the Sonrhais—Kabara—Timbuctu—A quaint desert city—A change of route—A steel canoe—Yakubu—Explorers—Réné Caillé—Barth—Scenes in Timbuctu—The Sonrhay empire—Mosques—Salt trade—Saharan sirocco—Desert caravans.

ON the 3rd of April I returned to Bambara-Maaundé on my way north to Timbuctu. My first plan had been to march due north, but I could get no guide to show me the way. The Fulanis declared that the route was impracticable at this time of year, owing to the scarcity of water, and in any case they had no man to serve as guide who knew the route.

I had grave suspicions of the truth of their statements, but unfortunately was not in a position to prove they were lying. In the end I had to go the way they recommended as being the only one possible at the time of the year. This route entailed a two days' march, followed by three days by canoe.

Carriers were not to be had as the Fulani is much too proud, or too lazy, to carry a load. So I had to hire bullocks for my baggage. Bullocks and camels, when obtainable, do all the transport in these regions. Bullocks can, at a pinch, march two days without water, carrying a load of about 150 lbs. They are humped oxen, very slow and sure in their movements. The driver—there is one to each animal—sits on the front of the hump, with the loads behind him, guiding his beast with a kind of rein passing through its nostrils.

At first we passed along the shores of Lake Niangaye, meeting on the way some camel and bullock caravans coming into the village. For the place is on the route from the north to Douentza market, and a fair amount of trade travels this way. A curious feature of this end of the lake is the number of pelicans seen on the water. They all congregate on the opposite side to Bambara-Maaundé, appearing to breed there in some quantities. In the evening the birds collect together, uttering strange cries, reminding one rather of the wildfowl on the seashores in the wilder parts of the British coast. They are uncouth-looking creatures with their enormous beaks, but seem to thrive wonderfully well on the fish of the lake. I suppose when the water here dries up they migrate to the Niger and its tributaries. I shot a few geese at Niangaye, but duck and teal were very scarce. The surrounding country is well stocked with sand-grouse and lesser bustard, but other varieties of game birds are not plentiful. I think I saw only one bushfowl, and the few guinea-fowl I shot appeared to be very tough. Indeed, I always noticed that the guinea-fowl shot in sandy districts was tough, irrespective of the age of the bird. I often wondered if possibly this was due to the semi-desert diet which they have to live on here.

We had to cross the high ridge of ground which separated the two easterly forks of the lake previously mentioned, and, when finally quitting the farthest fork of water, our journey took us through a patch of desert land. It was in this desert patch that I saw several ostriches. The huge birds were on the sky-line about half a mile away when I first noticed them, and, strangely enough, did not appear to have perceived me ; for they moved in quite a leisurely manner out of sight, instead of striding off as they usually do when alarmed.

I decided to try to stalk them. Provided they did not

move too rapidly the chances seemed to be in my favour, for the slope of the ground was such that I should be able to advance almost to the top of the ridge in front of me, unperceived. The wind helped me, as it was blowing directly in my face, so I was able successfully to carry out my plan, and, on arriving at the summit of the ridge, I got a fairly easy shot, lying behind a small hillock, at one of the birds. The feathers were not in bad condition, and later I found some of them invaluable for bartering with Arabs. Judging by the tracks, there appeared to be a number of these birds between the Niger and Lake Niangaye, although most of the ostrich hunting is done on the other side of the Niger and some hundred miles lower down. By questioning my native followers, indeed, I found that these ostriches do not seem to be hunted at all.

That day we did a long march, as I was anxious to get across the desert and camp by the water on the far side that night. The water was a swampy stream, called Tango-Maré, which was one of the tributaries of the River Bara-Issa. I camped by its shores, where the sand-flies and mosquitoes were worse than I had experienced for a very long time. My servant and the police orderly both got a severe attack of fever in consequence, and I passed a most uncomfortable night.

There was an encampment of wandering Tuaregs close by who made things look brighter by a very acceptable present of camel's milk, accompanied by protestations of friendship. This gift and the message accompanying it seemed so unlike the usual custom of the Tuaregs, where Europeans were concerned, that I made inquiries on the subject. It transpired that the last visit they had had from white men was when the French troops had visited this particular tribe and punished them severely for some misdeed. They evidently had a wholesome respect for the European now, or they would hardly have taken the

trouble to offer presents to a single individual! After leaving the stream where I had spent the night, we emerged on a country intersected by small lakes, swamps and marshy streams. I had sent on my baggage and servant early, staying myself behind to enjoy some duck shooting close to my camp of the previous night. The guide who was with me professed to know the route our loads had followed, but I hardly wonder he was at fault on several occasions.

Sometimes this network of waterways became practically one wide sheet of water, so intimately connected were the swamps and streams. On arriving at a place of this description, it became a matter of great difficulty to know where the water was fordable. The only plan was to try at a likely-looking spot, and go on until the water became too deep, when a new direction must be struck. It would have been dangerous to attempt to swim, owing to the thickly packed reeds which grew in profusion everywhere. Many times, after proceeding about half-way, and congratulating myself that we had found a passage, a hole or dense reeds prevented further progress, and we had to beat a retreat, endeavouring to find another ford. By the time we finally got to the other side of these huge morasses it was getting late, but fortunately the track was now dry and fairly well defined, so we were able to move at a good pace. I fully expected to hear, when joining the baggage, that half of it had been lost in the water, so it was cheering to be told that, beyond a little wetting, not much harm had been done. The guide with the baggage party appeared to have found a better crossing than we had done.

I had now reached a place from which I could get a navigable way to Kabara, as the port of Timbuctu is called. The name of this village was Sariamou, and it was on one of the main tributaries of the Bara-Issa.

After negotiating with the chief native trader of the place, I arranged for a canoe, with an awning of palm-

TIMBUCTU

The trees are in the cemetery. A monument is put up here to Lieut. Aube and his party who were killed in a battle with the Tuaregs at this spot in 1894 when trying to penetrate the mysterious city of Timbuctu.

thatch, to be ready for me the following day. I had a crew of five men, so that I should be able to travel fast. I estimated my distance from Kabara at seventy miles as the crow flies, so it was probably quite eighty by water, a distance I could not hope to cover in less than three days. Moreover, I could not arrange for the canoemen to accompany me more than one day, so that there were certain to be further vexatious delays in getting relief crews. In one respect I was lucky, however, that I should be able to keep the same canoe the whole way ; besides, this canoe was a fairly comfortable one as they went, and should I have been obliged to change daily, I should have had to put up with very inferior craft.

I occupied the centre of the canoe, while my servant and baggage were at one end and the crew at the other. There was just room to put up a camp table under my awning, where I could read or write, and at sunset we used to halt at the nearest village, so as to get a night's rest ashore.

The route was rather intricate, as the main stream was frequently blocked by impenetrable "borgou," necessitating a diversion through some side creek, and thereby lengthening our journey considerably. I found out also that very often the natives only knew the way from one village to the next, so that a guide had to be taken at almost each village we passed. These villages were inhabited by the Sonrhais, who were possessors of big herds of cattle similar to those owned by the Fulanis on the Niger. There was also in each village a certain proportion of Bosos, who were the fisherfolk of this country. The swampy banks were the haunts of numerous wart-hog, and one could often get a shot at these animals from the canoe as they stopped to watch it in their stupid fashion before scuttling off into the bush. Kob were also plentiful about these marshy streams, as were their near relatives, the Bohor reed-buck. For almost every kind of West

African game which frequents marshy tracts this was a splendid shooting country. The natives themselves hunt little, so that the game is not so shy and scared as it often is in places thickly populated with these hunters. The Sonrhais are too much given up to cattle and horse raising, while the Bosos are quite as devoted to their fishing, for either tribe to care for hunting game.

The horses in this locality were some of the finest I had seen. These people make rather a speciality, for natives, of horse-breeding. When the land is inundated and pasturage is rich, the horses are left for several months at a time in the fallow ground at the water-side. I noticed large droves of horses as we passed the banks. There were a large number of mares with foals on the higher ground, while the stallions were usually nearer the water.

I had despatched my horse by a more circuitous land route, so he would be several days later than I in arriving at Timbuctu, if, indeed, he ever arrived. He had been consigned to the care of the headman of the village, and was to be passed on from one to the other *en route*. In any case, the little beast had done me good service, and I had certainly had a good three pounds' worth of value from him!

On the 7th of April we entered the Niger, at a point some miles below the junction of its two branches, Issa-Ber and Bara-Issa. A short while after stopping for breakfast that morning we passed a barge, flying the French colours. The occupants were the officer in charge of the ostrich farm at Niafounké and his wife. They had been down the river for nearly three hundred miles to decide on a more suitable site for the farm, and were now on their way back to Niafounké. The lady was certainly the only European representative of her sex on that side of Koulikoro, and was regarded with great astonishment by many of the natives, who naturally had never seen a white woman before.

Soon after midday we sighted a small building on the river banks, built at the point where a big backwater of the Niger quits the main stream. This was Korioumé, and is used as the port of Timbuctu instead of Kabara during the driest months of the year, as vessels are then unable to get nearer to Timbuctu, owing to the lack of water. Kabara lies about five and a half miles further on, being approached by a canal. This canal is being enlarged to allow the passage of larger craft than can use it at present.

Kabara consists of a collection of mud huts, forming the dwellings of the transport officials and the native population. Alongside the quay lie a variety of river craft, barges, and steel as well as wooden canoes. It is not an imposing-looking spot, but is important as the headquarters of the Navigation Service for the section Kabara to Ansongo, a distance of nearly four hundred miles.

I landed and presented myself at the Transport Office, where I was provided with donkeys to carry my kit to Timbuctu, and was informed that the Commandant had very thoughtfully sent a horse for me to ride up to the town. All baggage is conveyed by donkeys to Timbuctu, and there are a number of men in the town who make their living by letting out donkeys for this purpose. The country immediately assumes the appearance of a desert on leaving Kabara. There is a wide track, worn by thousands of animals' feet, leading through the soft sand across the five miles which separate Timbuctu from her port. Beyond a few scattered gum trees, mimosa, and a little coarse grass, there is nothing but sand on all sides.

A short distance to the right of the road in the desert, and about half-way to Timbuctu, is a monument erected to Commandant Obb, the first Frenchman to try to enter Timbuctu. He had only a small following of twenty, and perished with all his gallant men in the attempt.

The monument is placed at the spot where he fell. The town was at that time in the hands of the Tuaregs, who swarmed in hundreds round his small band until they had annihilated it. Several subsequent attempts were made to capture the town before they finally succeeded. Curiously enough, the capture of Timbuctu was eventually made by a mere handful of men under a French naval lieutenant, and was effected by surprise. Since then, although it has several times been threatened by raiding bands of Tuaregs, it has never been out of the possession of the French.

On ascending a slight rise in the road, Timbuctu, the Mysterious City, suddenly comes into view.

As I saw it the scene spread out before me was a strange one. In a slight depression was the town itself, a conglomeration of sandy, brown buildings, with flat roofs, while here and there a minaret obtruded its pointed head. Most prominent of all were three mosques, one at the east, another at the centre, and the third at the west of the town. At the extreme western corner were three solitary palm trees, behind which the sun was dying, and as its last rays caught the sombre-hued houses they were lit up and stood out more clearly from the surrounding desert which they so closely resembled.

There was something rather fascinating about this quaint desert city, so solemn and subdued did it appear to be. But on the whole my feelings were those of disappointment, for I had expected a far more imposing-looking place. I had pictured to myself a town of fine Moorish buildings, minaretted palaces, and the bright appearance of an Oriental city. It had seemed to me that the influence of the Moorish occupation must be strongly impressed on Timbuctu, but this is not so to any marked extent. In point of fact, except for the three mosques, the general appearance of the town was very much like many others I had seen

A Scene just Outside the Walls of Timbuctu

These natives are Sonrhais who have brought milk for sale. Herds of cows, also sheep and goats, are kept on the banks of the Niger, five miles from Timbuctu, and it is the custom when they are giving plenty of milk to bring it daily to Timbuctu for sale.

on my journey through Western Soudan—anyhow, in the distance. Timbuctu's chief difference lies rather in her surroundings than in her individuality. She is alone in the desert. The desert surrounds her on all sides. The Niger is no longer a feature of the scenery; all her water is obtained from wells. As a matter of fact, sometimes, when the floods have been heavier than usual, a small backwater occasionally runs up from Kabara to Timbuctu, but this soon disappears as the floods subside, and to see water above ground is a rare sight.

Some of the wells are very deep, going down as much as seventy metres. The water is very good, however, and is seldom filtered. After presenting myself to the Commandant I was shown to the house of the military officer administering the district where I was to stay. My host, Captain Ferrière, was most thoughtful and obliging during my sojourn at Timbuctu, and I look back with pleasure to the pleasant days I spent with him.

I was much disappointed to hear that there was no possibility of being able to cross the Sahara from Timbuctu direct, as I had arranged. It appeared that, owing to some raiding bands of Southern Morocco having descended recently through the very country by which I wanted to pass, the guides were afraid to go that way. In addition the heat had this year been more severe than usual, and many wells were dry. At one stage it was necessary to march ten days without water. This being the case, I had to abandon all idea of starting the desert journey from Timbuctu, as I had intended, for to cross the Sahara without a guide is an absolute impossibility.

There was an alternative route open to me, however; this debouched from Gao, a place 270 miles further down the Niger, and was considerably to the east of the route I had proposed to take from Timbuctu. In addition to the annoyance of having to alter my plans, I was now some-

what anxious whether I should be able to arrive in England by the date my leave expired, for my journey would now be lengthened by some 700 miles altogether. I was further delayed a few days at Timbuctu before transport could be arranged for me to go down the river to Gao. I was told that I could have a steel canoe or a barge, but the former was much faster although not so comfortable. Before deciding it was suggested that I should take an experimental trip in the steel canoe, as the motion in these craft is rather pronounced and has the effect of making some people sea-sick !

On Sunday morning two French officers and I, having arranged a shooting picnic on the river, embarked on the steel canoe. This particular canoe was built expressly light to carry mails rapidly between Kabara and the down-river ports. She was rather narrow in the beam, and travelled at a great pace when propelled by her six paddlers. For the first half-hour I did not feel much inconvenience, but after this the violent rocking motion made me feel very uncomfortable ; besides, owing to the constant shaking, reading or writing was out of the question. Finally, I must acknowledge that, on the return journey, I succumbed, and, indeed, so bad was I that I had a violent attack of fever before I got ashore. On landing, the transport officer at Kabara very kindly gave me a bed in his house, with plenty of blankets and quinine, so that by the next day I was much better. But this experience with the steel canoe decided me against that particular form of conveyance, and, at the risk of taking a few days longer on the journey, I gave an unhesitating vote for the barge !

During my enforced stay at Timbuctu I had ample leisure to explore the sights of the place. I was introduced to an interesting Frenchman, who is popularly known to his friends and the natives as Yakubu. Yakubu had the

reputation, which he thoroughly deserved, of knowing more about Timbuctu than any man. He had previously been a Roman Catholic Father in the town, but some years ago had given up mission work for private life. He now taught native children purely from a love of teaching. Besides his knowledge of Timbuctu, he had an intimate acquaintance with Bambaras and Sonrhais and their languages, which he spoke fluently. It was with " Père " Yakubu that I made my tour of exploration in the city.

Timbuctu and the exploration of Africa during last century are very intimately connected. Most of the principal explorers of that time paid a visit to this historic city. This was perhaps all the more natural as, at that period, the course of the Niger was a problem which puzzled everyone, and many of these travellers had in view the exploration of that river. At Timbuctu are to be seen the houses of most of these explorers, which have been identified by the French since their occupation and kept by them in a good state of repair.

Starting with the earliest date comes the house of a fellow-countryman, Major Laing. This British officer made an adventurous journey in 1826 from Morocco to Timbuctu, through the Sahara Desert, and through a land peopled with lawless fanatical Mohammedans. He accomplished the journey there without mishap, but on his return by the same route he was waylaid and killed in the desert, north of Timbuctu. He is said to have been killed by the Kountah Arabs, who inhabit a portion of the Sahara north of the town ; but it is a point difficult to prove. Some people say that the present chief of the Kountahs has actually in his possession Laing's diary and papers, which were never recovered,* but that he is now

* Major Laing's grave has quite recently been discovered, according to French reports, at a place called Saeb, thirty miles north of Timbuctu, but his valuable papers have not been found.

afraid of restoring them to the French for fear of punishment. If this is the case it must have been the present chief's grandfather who was responsible for the deed. The next traveller to pass that way was Réné Caillé, a Frenchman, and, I suppose, the most renowned French explorer of Africa He did a wonderful journey in 1828 from Konakry, in French Guinea, to Morocco. He travelled down the Niger for many hundred miles on his way to Timbuctu.

After him came the very great African traveller, Barth, whose house is in better preservation than any other. He was the man who travelled from Tripoli, through our British protectorate of Northern Nigeria, to Timbuctu and back, in 1853. Barth spent a considerable time at Timbuctu, disguised as an Arab trader and known by the name of Abdul Karim. He had several narrow escapes, but came successfully out of all his adventures.

The next house to be seen is that of Lenz, an Austrian, who journeyed from Morocco to Dakar in 1880.

The interior of these houses, as of nearly all the houses in the town, is of Moorish design. There are generally an inner and an outer courtyard, on a very small scale. Most of the houses have two storeys, and all are built of sun-dried bricks, made of the clay which is found under the sand in the desert. The streets are narrow and tortuous. They twist and wind in such a curious manner that a guide is necessary for some time before it is possible to find one's own way in the place. At one or two points great clay ovens are to be seen in the street; these are public property, and here the local bread is baked. It is a curious sight to watch a crowd of people round an oven in the daytime, each one putting in his or her loaf to be baked. This bread is made of a wheat grown at Gundam, near Timbuctu, and is black. The wheat is, I believe, the same as is grown in many parts of North Africa, making a very

wholesome and nourishing food, which is the staple diet of the inhabitants.

The history of the mosques brings me to discuss the origin of the greatness of Timbuctu.

Timbuctu was originally the capital of a great black empire. The inhabitants were Sonrhais, whose territory extended practically all over the Middle Niger. The Sonrhay kings were men of great influence, and the town was the centre of a large trade. For many years Moors from the north and the black races from the south, east, and west used to bring their wares to its markets. The Sonrhay Empire was far the most powerful in Western Africa, continuing to be so till the Moorish invasion in 1482. The Moors defeated the Sonrhais, driving them to take refuge on the other bank of the Niger, in the " Bend." They were in turn driven out of the town by the Tuaregs about the seventeenth century, and the Tuaregs remained in possession until the French finally captured the town at the end of last century.

Timbuctu was the centre of the traffic in slaves in this part of Africa, and there is no doubt that at that time it was a far larger place than it now is. The remains of old houses are frequently discovered under the sand at some distance from the existing boundaries of the city, while it seems very probable that the Niger once flowed past its walls.

The Sonrhais certainly extended in olden times from Djenné, in the south, to Es-Souk, in the north. The latter place is now right in the Sahara, about the 21st parallel north latitude. But now this once powerful race has greatly degenerated. Since their conquest by the Moors, and then by the Tuaregs, they have been in perpetual slavery ; thus their spirit appears to have become quite crushed, and the race has been split up into little groups. We have met them in fractions all over the " Bend " of the

Niger, and they are again to be found in small parties lower down that river. They have intermarried a good deal with their last conquerors, the Tuaregs, whom they frequently resemble in features. The negroid type of the pure Sonrhay has in many cases almost disappeared, while they have become paler in complexion, although they are still much blacker than the Tuaregs.

The mosques date from the eleventh century, and have curious pyramidical minarets. During the sixteenth century they had arches of Moorish design added to them by the Moorish chief Mali, who then occupied the town. Here the remarkable influence of the desert sand is noticeable, for, to get to the arches which are inside the mosques, a descent of three or four feet from the level of the street outside has to be made. This shows that sand to the thickness of several feet has gradually become heaped on to the ground outside, thereby heightening the level of the surface.

The chief trade of the city is salt. This is brought by large caravans periodically from the desert mines of Taudény, 300 miles north of the place. The salt is cut in rectangular bars, or flat slabs, weighing each about sixty pounds. When the caravans arrive, from November till March, the price of salt is down to five francs a bar, but it rises rapidly as the hot weather goes on, so that by the month of August a bar of salt will often cost twenty-five francs. These salt caravans are frequently attacked by desert highwaymen. Desert bands have been known to travel immense distances in order to attack one of them. Frequently they make a descent from South-west Morocco, over 800 miles of the Sahara, with the object of looting the camels of the " Azalai," as the big caravan of November is called.

At Timbuctu one experiences the true Saharan sirocco, a violent wind blowing from the north-east. This wind is

said to originate in the sand-hills, called the " Great Erg," south-west of Tunisia. It blows straight across the desert for over 1800 miles, driving clouds of sand in front of it. There is nothing to obstruct its progress, for no mountains of any consequence lie across its path. Hence this wind appears to be gradually pushing the Sahara further south in the vicinity of Timbuctu. It has probably been the means of isolating the town from the Niger, for it has caused the desert to encroach on the left bank of the river converting the land here into a sandy waste. The sand I had experienced hitherto was nothing compared to the sand at Timbuctu. The streets are several inches deep in soft sand, it is nearly always blowing gales of sand; and as a result of all this every corner of a house and all one's possessions are invaded by sand. But on account of this dry atmosphere Timbuctu is a very healthy place ; sickness of any sort is uncommon, and the natives are said to be remarkable for their longevity.

The only domestic animals seen in the town are camels, horses, and donkeys. There are no cows, sheep, or even goats, for the simple reason that there is nothing for these animals to eat. Camels never stay long at Timbuctu, but are sent out to pasturage some distance away, where there is more desert vegetation. Donkeys seem to live on what they can pick up at Kabara, where they go most days to carry loads. Horses are fed on imported forage.

Camels, of course, come in hundreds to Timbuctu, as they form the bulk of the animal transport for desert caravans. It is a strange sight to watch these hardy desert people, trudging in with their camels from the vast unknown waste, their faces half hidden in cloths to keep out the ever-blowing sand, looking weary and worn after the hardships they have had to endure on the way. Lack of water and want of food, besides the anxieties of keeping the right direction, tell on these men, imprinting on their

faces a stern, careworn look. The camels are generally the property of Arabs, either the Kountah tribe, who are the nearest to Timbuctu, or the Berabeesh, who wander farther to the north in the desert. The best animals belong to the latter tribe, possibly because they are farther from the river, and the Niger water does not agree with these animals. Moreover, camels which live near the river naturally get into the habit of drinking more frequently than otherwise, thus losing to a large extent their powers of existing many days without water.

CHAPTER XVIII

Preparing to cross the desert—Articles for barter—My barge—My new "boy"—My crew—Stranded—A miserable people—"Cram-cram"—Borgou—Bamba—Under sail—A variety of game—The defile of Tosaye—The "Oued Telemsi"—A curious coloured clay—Gao—A lazy class—Mosques at Gao—A perilous journey—Giraffe.

ON the 12th of April my barge was to be ready for me at Kabara. I had asked the Commandant to send a telegram to the authorities at Gao, advising them of the probable date of my arrival there, and asking that the necessary camels and guide should be ready for me. I thus hoped to avoid further delay, as time was of such importance to me.

While at Timbuctu I had gleaned some information about the probable line of wells I should follow from Gao, for I had not previously studied this part of the Sahara, but only that portion I had intended to cross from Timbuctu in accordance with my original plans. The information at Timbuctu even was very scanty, and I was told that before arriving at Gao it would not be possible to find out any more.

Before leaving Timbuctu I arranged for the despatch of the heads and skins I had collected since leaving Bamako. They were consigned to a French firm, who agreed to have them sent through their head establishment in France to my home address. They would, of course, go up the Niger and down the Senegal River to the coast. On arriving at Bamako I had similarly arranged for the despatch of the trophies I had collected on my way from

Sierra Leone. As the Senegal River would be at its driest during the next three or four months, it was probable that my things would not arrive in England for several months.

Another important matter was to cash my drafts at Timbuctu before leaving, and to lay in a supply of the most useful articles for barter *en route*. Below Timbuctu very little money is used on the Niger. Salt and a blue cotton stuff are in great requisition for the purchase of anything. The cotton stuff is called "guinée" by the French. If it is required to buy a fowl or sheep the procedure is to break off a piece of salt from one of the big bars or to tear off a small portion of the "guinée" and give that in exchange for the article to be purchased. The "guinée" is measured in "coudées," or fore-arm lengths. Between Gao and Timbuctu a sheep can be bought for two or three "coudées," but as one gets farther from the river, on entering the desert, the price of everything naturally rises rapidly, while in many places even untold "guinée coudées" will not tempt the native to part with his produce.

I therefore converted a portion of my cash into salt and "guinée." I was also advised to get in a stock of a certain kind of food which is very useful in the desert and not obtainable at Gao. This is called "couscous." It consists merely of the wheat used for Timbuctu bread, prepared in a particular way. The wheat is unhusked and then steamed for some hours. It is dry and very portable, at the same time it softens quickly in a little water, and is easily digested. "Couscous" can be carried in a bag slung across a camel, and will keep for months in this manner. Frequently there is not time to stop for a meal in the desert, when a handful of "couscous" can be conveniently moistened in a tumbler of water without dismounting from the camel. I took a large quantity

with me and found it invaluable. It lasted me all the way across the Sahara.

My barge was about sixty feet long, with a well-covered portion, about thirty feet long, in the centre, in which I lived. The rest of the space was for the crew and my servant. I had my bed pitched in one end of my room, my baggage being arranged all around it, while the table was in the centre. There was plenty of room, and it was not uncomfortable. The covering was made of strong palm-thatch, and was high enough to give plenty of space for a man to stand upright in the room underneath.

The barge was worked by a crew of eight and a boatswain. They generally used poles, but sometimes paddled the craft.

In the early morning, until the sun got too hot, I used to sit on the top of my awning with my shot-gun and rifle beside me, often getting a shot at a bird or crocodile. It was very pleasant in the fresh morning air, watching the changing scenery as we glided steadily past the banks. In the middle of the day I used to halt, near a village if possible, for lunch. This plan gave the crew a rest, and was welcomed by everyone as a chance of getting ashore. In the evening I also used to halt for dinner, but it was then often dark before we got ashore.

Sometimes, when the banks were favourable, we would tie a rope on to the mast and tow the barge, while the boatswain sat at the rudder, shouting out directions to the men on the tow-line. During the heat of the day, when sitting in my room, I found ample time for, and occupation in writing up my notes, which had not had as careful attention as I could have wished while I was hunting in the " Bend " of the Niger. I cannot say that I ever found the time hanging heavily on my hands, although, of course, there were moments when I should have been very glad of a companion.

At Timbuctu I had not been sorry to part with my servant Mamadu, and had got a far better "boy" in his place. My new factotum was called Musa. He was a Hausa from the Zaberma country, north-west of Northern Nigeria, who had for a time been employed by a French officer at Timbuctu, but was now out of work. Besides being a better and more trustworthy servant, he had some experience of the desert. He had been for two years the "boy" of Commandant Gadel, a distinguished French officer, who had travelled considerably in the Eastern Sahara. Musa was a hard-working and devoted "boy." He had some fairly rough times while in the desert with me, and bore all the hardships and discomforts uncomplainingly. He was a fine type of native, standing a little over six feet, with a broad chest and sturdy arms, and, like most Hausas, was an excellent marcher, a most indispensable asset for my servant.

My crew were Bambaras, who are preferred by the French as boatmen on their Niger craft. They are very strong, and wonderfully enduring. My crew worked day and night for seven days continuously. By day the whole crew were on duty, while at night they worked in two reliefs, one half resting and the other half working. We seldom halted for more than three hours per diem—an hour at midday and two hours in the evening—so that they really had very little rest.

The Bambaras hold the Sonrhais in great contempt, forgetful of the day when the Sonrhay was a far more powerful individual than was the Bambara, and, indeed, held many of that race in slavery. But times had changed, and it was amusing to hear the scathing remarks of my boatswain as we passed a Sonrhay canoe or habitation. He used to say they were a miserable people, more like sheep than men, because they ate grass growing on the Niger banks! The Bambaras are rather proud and great

spendthrifts. They like to live on the fat of the land, considering a man who is content with humbler diet as a miserable creature, not even worthy of pity.

The first few miles of the journey after leaving Kabara lay through a shallow stream, which was the waterway connecting Kabara with the Niger on the east. This stream was so shallow that we had considerable difficulty in moving at all. The barge only drew about nine inches of water, but in spite of this she kept on sticking on the mud. When this happened the crew had to get out and push until we got clear. Progress was very slow. Finally, about half a mile before reaching the Niger, there was practically no water at all. Our efforts to move the barge were fruitless, and unless we got help we seemed likely to stick for months, until the water rose. Accordingly, I sent some of the crew to seek out the nearest village and bring assistance. It took some fifty men to get us out of our difficulties, and then it was only effected by digging a trench under the barge, through which she was hauled by the triumphant, yelling mob of natives.

Owing to the delay caused by the shallow water our progress that day was not great. In twelve hours we had only covered eight miles. But during the remainder of the voyage we averaged thirty-five miles in the twenty-four hours. As this included a halt of about three hours daily, and only half the crew were at work during the night, the result was not bad.

The whole way down the river from Kabara to Gao the banks are populated by Sonrhais. I must own to rather agreeing with my friend the Bambara boatswain. These people are certainly very wretched specimens of humanity. The Sonrhais on this portion of the Niger seem to have degenerated more than those whom I had hitherto met. They are absolutely poverty-stricken, and apparently make no effort to ameliorate their position.

They possess practically no cattle or sheep, but live on rotting fish and grass. The former is in great evidence all down the Niger. There are tanks where the fish are caught, and drying-places close by. In the latter the fish are left to rot, when they are taken away and eaten. The stench from these places is truly disgusting. Even the Bambaras used to turn up their noses at it.

The grass they eat is of two kinds—the "borgou," with which I was now so familiar, and which is eaten raw or in a kind of soup, and "cram-cram." "Cram-cram" is a grass peculiar to desert vegetation; it is intensely prickly, and it is the seed of this that is boiled and eaten by the Sonrhais of this locality. "Cram-cram" is a very nourishing seed, I was given to understand. The flocks of the desert are very partial to this grass, as are also camels. It has the annoying habit of sticking to one's legs as one walks through it, just as burrs do in England. "Cram-cram" is worse, however, than a burr, because it breaks up into countless little prickles, each one so fine that it can hardly be seen. These prickles have points as sharp as a needle, which stick into the fingers of the hapless victim, and are hard to extract because they are so hard to locate. I once saw a French officer who had a little dog which was suffering from "cram-cram." The poor little creature was in tortures, and unable to withdraw these miniature daggers from his toes. It took some time and patience on our part before we could relieve him of all of them.

In some places we would pass a temporary village of Fulanis, who had come down to the water-side to allow their cattle to graze on the luxuriant "borgou." Occasionally, also, we would see an encampment of Tuaregs, who had selected this spot as favourable for their flocks of sheep and goats. These people generally stay on the higher ground to the north of the river, but, at this season, when the grass is scorched by the hot sun and grazing is

poor for their animals, they approach the Niger in order to find pasturage for their flocks.

The river here is more than half a mile wide in its navigable channel, but there are besides several hundred yards of "borgou" swamps on either side. Near the villages a channel is cut through this stuff, by which canoes can approach. Otherwise it forms an impenetrable mass on the edges of the water. In the hot season the "borgou" is left isolated, as the river falls, until it dies away for want of moisture; for water is a necessity to the existence of this grass.

On the left bank the desert seems to commence almost as soon as the water is left. Stretches of sand, with a little stunted vegetation, characterize the country on this side of the Niger. The ground rises in a series of parallel sand-dunes towards the interior. On the right bank there is more vegetation, and apparently more human life.

On the 15th we arrived at the post of Bamba. This little place is practically the most northern point of the "Bend" of the Niger. For this reason it has been a favourite objective for the marauding bands of the desert in the past, and, even now, is sometimes descended on by a party of these intrepid highwaymen should they find a good opportunity. It is naturally easier for them to raid the place geographically nearest their desert wilds, and then to escape before retribution is visited upon them. At Bamba there are a French Commissioner and a European in charge of the Post and Telegraph Office. One curious feature of Bamba is the existence of a few date palms. These were planted by the Moors during their occupation of the country about A.D. 1500, and are practically the only ones in the Western Soudan. Dates seen in the country are generally imported from the oases of the Sahara, many hundred miles to the northward. Here, much to the delight of my crew, I gave them a present of a

sheep, and made a longer halt than usual that evening to give them time to cook it.

The Commissioner, with whom I had dined, came down to the river to see me off, as I started about 9 p.m.

The effects of a heavy meal of sheep had evidently been too much for my Bambaras, for I found them one and all sleeping soundly and snoring lustily. We had great difficulty in arousing them from their torpor, so that it was considerably after the appointed hour when we got under way. There was a fair breeze blowing, of which we took advantage to hoist our sail. The river in this section runs almost due east, and as the wind is usually from the east or north-east, we had not previously had an opportunity of trying to sail. Under the starry sky we sped rapidly along, and I sat outside for some time, enjoying the cool air and the beautiful tropical night. In the early morning the wind shifted to its accustomed quarter, and we found ourselves opposed by a strong easterly gale. Generally speaking, this wind lasted from 5 a.m. till 11 a.m., and we made but little progress during these hours. Small wavelets would play over the face of the Niger, and a heavy spray would be blown on board.

The river was now at its widest, and from shore to shore must have been well over three miles. How strange it seemed to look at this vast, broad stream and to think of its appearance when I first saw it at its birth, near the Tembikunda Mountains. It had travelled far since those days, having covered about 1200 miles. This portion of the river contains many islands, which are covered by water when the Niger rises, but are the habitation of Fulani and Tuareg with their herds and flocks at this time of the year. Landing on these islands for the evening halt, one was always sure of finding some duck and teal in the ponds and swamps upon them.

The red-fronted gazelle and kob are plentiful. The

former is found chiefly on the left bank, as being more sandy and desert-like, while the latter has its favourite haunts on the right bank, where the marshy ground is suited to its habits. On the left bank I was informed there were giraffe, but I never saw their tracks. I think, however, that it is very probable giraffe are found between Bamba and Bourem, where the country seems well suited to them. Senegal haartebeest are on both banks. In the river there are a few hippo pools, but hippopotami did not seem as plentiful here as they had been higher up the Niger The stately marabout and the picturesque crown-bird were both familiar objects on the Niger landscape. The latter bird was particularly common about here, and was easy to approach. The crown-bird, or crested crane, is certainly one of the handsomest birds found on this part of the Niger, for its fine plumage and quaint straw-coloured crest at once distinguish it from the ordinary waterfowl here seen.

On the 16th of April, about 7 a.m., we approached the Defile of Tosaye. This was rather an interesting point in the Niger scenery, for here, for the first time since the Rapids of Kienefala, near Bamako, the river gathers a more rapid current. On the whole the Niger current is sluggish, as the fall of the land from the Tembikunda Mountains to the sea is so gradual. But at Tosaye the stream is forced through a narrow defile, and the water, which just before was spread over a breadth of at least two miles, is compressed into a width of 500 to 600 yards. The rush of water is remarkable in comparison to the slow, steady flow to which we had so long been accustomed.

The entrance to the defile is a pretty sight. On either side there begins to appear a low ridge of laterite rocks, which gradually rises to a height of forty feet above the level of the stream, in a precipitous mass. The whole length of the defile is three miles, while three distinct

rocky barriers cross the river transversely. These transverse barriers render navigation dangerous and arduous. A fourth barrier, passing longitudinally up and down stream, divides the waterway into two nearly equal passages. The current flows at a rate of six to eight knots an hour at this time of year, but when the river is in full flood the rush of water must be tremendous. In the channels themselves there are numerous jagged rocks projecting, or half-hidden under water. Navigation, therefore, is a risky business, and the frail native canoes often get dashed to pieces against one of them. There is an old French fort, at a bend in the defile, perched on the top of the rocks on the right bank. The place is now disused, but was built originally to command the Tosaye defile when the French first occupied this portion of the country. Except for this narrow fringe of rocks on each side, the country is of a sandy nature, covered with the usual sparse, desert-like vegetation.

On emerging from the defile the transition is almost as rapid as it was on entering Tosaye, for the rocks rapidly disappear, the river quickly resumes its former width, and the current reverts to its normal pace.

About twenty miles below Tosaye is the post of Bourem. The chief interest of Bourem lies in the fact that it is at the mouth of the " Wad Telemsi," or " Oued Telemsi." This is a dried-up watercourse, descending from the heart of the Sahara to the River Niger. In olden times it must have been an important tributary of the river, but now water does not flow in it above the surface ; below the surface, however, there is water, and for this reason there is a well-defined line of wells along the watercourse, and it forms a trade route for caravans travelling from the Sahara to the Niger. It follows that Bourem is a place frequented by caravans, although it is not of much importance in itself, and these caravans merely use it as a

halting-place *en route* to the bigger markets of Gao or Timbuetu.

At Bourem there is found a curious coloured clay, which is used for houses. There are three colours of this clay, pink, violet, and white. The town itself lies up a small branch of the Niger, about five miles from the main stream. When the river is at its fullest the main stream covers all the intervening land, making one wide expanse of water with its small branch, and, at this period, Bourem has the Niger flowing at its very walls. The town is built on a high rise of ground, so is at all times clearly visible from the Niger.

Soon after leaving Tosaye and before arriving at Bourem, the river takes a decided turn south-east, as it enters on its course down the big "Bend." Between this point and a prominent spur on the left bank, called Mount Tondibi, the width again increases to over four miles. As Gao is approached the width decreases to about two miles, and the channel is interrupted by several islands and large masses of "borgou." On the right bank a ridge of sand-hills makes its appearance, running close to the water's edge. This part of the country is the centre of a large rice-growing population, the quality of whose rice, if not the quantity, compares favourably with that grown in Macina.

At the landing-stage at Gao I was met by a French officer, who conducted me to the Commandant. As it was late that evening the Commandant would not hear of business being discussed till the following day. I was given a comfortable dwelling in the officers' mess quarters, who, with their usual hospitality, insisted on my remaining their guest during my stay at Gao. On landing at Gao the first sight which strikes the visitor is a number of huge skulls of elephant, set up on high pedestals, adorning the front of the fort. These animals have been shot at various

times by the officers stationed at Gao, and their skulls have been put to this rather singular use. Gao is quite the best planned station on the Upper and Middle Niger. A fine avenue of trees has been planted along the river bank; behind this lie the Commandant's house, the fort, and the native quarter respectively. The native quarter has been built some distance away from the Europeans' houses, so that there is a fine open space between them. The houses are substantially built, with big rooms and lofty flat roofs. The desert is behind the town, so that its well-to-do appearance is all the more striking.

I came across a class of people here whom I had not previously met. These were the Armas. They are a fusion of the Moorish and Sonrhay races, and are found in small groups between Bamba and Gao. Apparently they are a lazy, good-for-nothing people, who consider themselves superior to the Sonrhais and refuse to work. Now that slavery and serfdom are rapidly dying out, this tribe will find existence somewhat difficult unless they change their habits. The officer administering Gao told me he had given them notice that if they did not shortly show some intention of working he would turn them out of the town. In appearance they are more like the Moors than the Sonrhais, but are darker than the former. They have their own quarter in the place, and also have a mosque to themselves.

There are two fine mosques at Gao, one of which is three centuries old.

At Gao I used to stroll in the evening on the flat roof of my abode and gaze over the vast desert stretched out in front of me, wondering what adventures that solemn, forbidding expanse held in store for me.

The Commandant had arranged for camels for me and a guide, but they would not be ready for a few days, so I had a little time to complete my preparations. In the meantime the Commandant did his best to dissuade me

from attempting to cross the desert, wishing me to return to Europe through Dahomey, which was the quickest way from Gao. His reasons were that my journey would be difficult and dangerous, and my chances of arriving at the other end of the Sahara in safety were remote. He said that quite recently they had had reports of the movement of a marauding party of Arabs who were within easy reach of the line of wells I should probably follow. Further, there was a bad stretch of desert to be crossed, called the Tanezrouft, in which there were no wells for seven days, and, at this hot season of the year, the passage of this waterless tract would be particularly arduous. I dare say he felt that it was his duty to try to dissuade me from my enterprise, and probably thought besides that he might be held responsible should any mishap befall me.

With some difficulty I explained that before leaving Sierra Leone I was aware of the hardships and dangers likely to be encountered, and that I should be extremely foolish to turn back at this point of my travels. Moreover, having obtained permission for the journey, I had no intention of abandoning it now. I think he was finally convinced that I was firm in my resolves, and he then gave up further attempts to shake them. To avoid any possibility of blame being attached to him in the event of any accident to me, I signed a paper stating that he had tried to make me abandon my desert journey, but in spite of his warnings I had decided to carry it out. He was particularly distressed because he could not send an escort with me, for in the hot season most of the camels of his troops were out at pasturage, and many had not recovered from their hard work of the previous cold season. However, I told him I had never expected to have an escort, and he must not be anxious on that account. As it happened, he was sending some stores and ammunition to a French detachment at a place called Kidal, about 170 miles north in the

Sahara, and so it was arranged that this escort should accompany me, as Kidal lay on my route.

In the meantime we arranged a small hunting expedition to occupy the time till my camels should be ready. One of the French officers and I planned to go out to a place about one day's march distant to hunt giraffe.

We pitched our camp a few miles from the Niger on its right bank; it was a place with a reputation for being frequented by giraffe, and I had great hopes of getting a shot at one. The country was of the usual sandy nature, with a certain amount of mimosa and scrubby vegetation. The giraffe is extremely fond of the mimosa tree, so it seemed likely I might find them at their feeding-time about here. This interesting animal is very hard to see, as its curious speckled colour assimilates well with the sandy surroundings, while its long neck peeps through the leafy top of a mimosa and is hardly discernible. Giraffes come down to the Niger to drink at night, returning before dawn to their feeding-grounds in the interior, and for this reason they are difficult to come across. Besides, they are very shy. A giraffe will usually perceive you long before you have perceived him, and he can travel both fast and far in a day. A curious fact about the giraffe near Gao is that they are said often to break the telegraph wire with their long necks as they go down to the Niger to drink, for they do not notice the thin wire as they pass it.

It seems a pity that large numbers of these giraffe are slaughtered annually by the natives for their skins, which are used to make shoe-soles, purses, etc. The giraffe is only found in comparatively few places now, and it is to be feared that it will soon be exterminated in this part of Africa, should stringent measures not be adopted to prevent its wholesale massacre. The giraffe here seemed generally to be in small numbers. I never noticed the tracks of more than three together. In those cases there

seemed to be one a great deal smaller than the other two, which makes one imagine that they do not breed much, there being only one baby in most of these families. The natives hunt giraffe on horseback, pursuing them many miles inland until they get weary, when they are easier to approach. A horse will generally wear down a giraffe, although the latter has a greater turn of speed.

Our camp at Gangaber was suddenly broken up by the news that the camels and guide would be ready two days sooner than I had expected, so we returned to Gao at once without getting a shot at giraffe.

CHAPTER XIX

Loading a camel—Water vessels—My camels—My caravan—Nomads of the Sahara—Vegetation of the desert—Country of the Kountahs—Line of wells—Rainfall—My tent—Gazelle—Fowls of the desert—A trying march—Ill-used animals—How to mount a camel—Moroseness of the camel—Vagaries of the camel—An unpleasant feature—Uncomfortable riding.

THE preparations to be made for a journey across the Sahara are many, as I soon found out at Gao. It was not merely a question of arranging for the hire of camels and the services of a guide, but various other points wanted careful attention.

To start with, the baggage had to be made up in loads suitable for camel transport, and, naturally, on a pack animal a far more accurate adjustment of weights is necessary than is the case with carriers. Besides, I found that cases of provisions, my tin travelling bath, and even my camp table (Uganda pattern), were the reverse of being comfortable loads on the desert camel, although they had been very compact for transport on porters' heads. All these things had to be either left behind or put into leathern bags, called " mesoued." A bag is quite the easiest form of baggage for a camel to carry. Two of these can be slung over the pack-saddle, and the weights easily adjusted by taking something out of the heavier and adding it to the lighter one. No ropes are necessary to tie a " mesoued " on to the saddle, while boxes and such-like loads have to be strapped round with cords, and tied on to hooks on the pack-saddle. These ropes, however strong, break sooner or later, with the result that your cases fall

with a crash to the ground and the contents are probably scattered in all directions.

As this was my first experience of the desert I had to learn all these little points, but, fortunately for me, my French friends helped me with much practical advice, making my task much easier. I had to retain some of my cases, however, as sufficient bags were not forthcoming, and I rather unwisely decided to retain my bath. Although water would be scarce on the way, I could not help thinking that the luxury of a bath when I did arrive at a well would be too great to forego !

I replenished my stock of rice so as to have sufficient to ration my servant and guide, and at the same time I carefully overhauled my tinned provisions. My supply of the latter was decidedly low, but there were no means of increasing it now ; besides, I had made up my mind to live on the simplest fare, such as farinaceous food, in order not to augment unduly the number of camels in my caravan by having too many loads. I had, however, to arrange for sufficient rations to last till my arrival at Insalah, in about seven weeks' time. I was informed that at the oasis of Insalah I should be able to reprovision myself for the remainder of the desert journey.

Another most important item for consideration was the means for carrying water. Big glass demijohns are impracticable in the desert. They make the water hot, and are extremely likely to break, should a camel drop its load, or even if the beast should knock up against one of his fellows, in his usual clumsy manner. The French use two kinds of water-carriers. The one mostly used, and invariably used by the nomads of the desert, is a leather water-skin, called " guerba," which is generally porous, and therefore leaks to a certain extent, but keeps the water cool, and is easily slung on a camel's back.

The other kind is an iron or aluminium cylindrical vessel,

which can be locked if necessary, and cannot break. The water therein contained gets very hot, but is never wasted as in a "guerba." I was obliged to take "guerbas," as no metal carriers were available. And I provided myself with eight of these.

In connection with the subject of water, which is, indeed, *the* vital item in desert marches, I had to arrange to have some means of drawing water from a well. This is a more serious problem than may be thought, for wells in the Sahara are often seventy yards or more deep. In one case I recollect there was a well over 330 feet deep! To draw water from such a depth a long rope of hide is required, at the end of which is attached a leather bucket, called "délou." Spare material of all kinds must be carried, as a caravan must be absolutely self-contained from start to finish, and any omissions in calculating requisite stores are likely to be heavily paid for in the desert.

All gear has to be thoroughly tested as to its strength and durability before embarking on a journey, and this is a matter to be attended to personally, for a native cannot be trusted.

Of course, two most important items are the camels and the guide. My animals belonged to the Kountah Arabs, who wander in that part of the Sahara north of Gao, while the guide was also a Kountah Arab, named Sidi Mahomed. I had a second guide for the journey as far as Kidal, a Tuareg, from the Ifora country, through which I should pass.

The camels were rather a sorry-looking lot of animals, whose aspect was not reassuring to a person about to start on a long desert march, but the Kountah chief, from whom I hired them, vouched for their ability to take me and my belongings safely to Kidal. I had no intention of keeping these camels or the guides beyond Kidal, but would hire a fresh caravan there. The Commandant

THE DEPARTURE FROM GAO

The loads are being adjusted before my caravan starts on its long trek across the Sahara. All baggage has to be securely bound with rope to the pack-saddle, as the camel has a playful way of ridding himself of a load by shaking his unwieldy frame, by kicking violently with his grotesque hind-legs, or by rubbing the offending package vigorously against a neighbour's flanks until he succeeds in dislodging it.

kindly helped in this matter by sending a camel-runner in advance to the officer commanding the post at Kidal, to prepare camels and a guide for me. These camel-couriers travel much faster than a caravan. We calculated to take twelve days over the journey, whereas he would accomplish it in five or six. The courier's mount is a fast-trotting camel, which at a pinch can cover about fifty miles a day.

On the 23rd of April all was ready, and I decided to start that afternoon, so as to avoid marching in the day when it was hot. As I gazed for the last time at the broad, calm bosom of the Niger, flowing gently by the walls of Gao on its way to the sea, I could not help feeling rather serious, and wondering when I should again see running water, if, indeed, ever. Before me was the unknown mystery of the great Sahara Desert, and in it I was to pass many long and weary days before I should arrive in a country watered by running streams. How often should I not long for a glimpse of the cool, rippling river I was now looking on for the last time! For days I must be content with the sight of a well, if I was to see any water at all; and, at the time, I hardly realized how welcome the sight of that well would be. About 4 p.m., as the sun was losing its power, having bidden adieu to my good hosts at Gao, I prepared to start.

All the Europeans at the station were assembled to see me off. I fully believe most of them thought I should never reach my destination. I promised the Commandant to write to him as soon as I reached Insalah to announce my safe arrival so far. There were many cameras raised to get a snapshot of my party before their departure, and then we were off.

My escort consisted of one non-commissioned officer and six soldiers, all natives, belonging to the Senegalese Tirailleurs. I had one riding-camel for myself and four

baggage camels, one of the latter being lightly laden, and carrying my servant for a portion of the day's march. The remaining camels, numbering eighteen, were carrying Government stores for Kidal. I waited behind to allow the string of camels to file off in front of me before mounting my own animal, and following in their wake.

I intended to march till sunset that evening, and then halt for a few hours' rest until the moon got up. As soon as the moon rose I would start again, and march till eight or nine the following morning. I was anxious to march as little as possible during the day because of the intense heat. Besides, most of the tirailleurs were on foot, and night marching would be less fatiguing for them. The predominant question of water also had to be thought of, as a man wants to drink less if halted in the heat than if he is marching at that time.

The southern portion of the Sahara about Gao is desert in the sense of being a deserted land, that is to say a land without any fixed inhabitants. There are comparatively few parts of the Sahara which are absolutely deserted by mankind, for almost the whole of this lonely region has a population of nomads. These nomads, it is true, are very few in numbers, and rarely stay in one spot for any length of time. Their movements are dictated by two things. Firstly, the state of the pasturage in the locality where they are is an all-important factor. Nomads of the desert must of necessity be mounted on camels, chiefly, if not entirely, for they are the only animals adapted to an existence which entails long periods without water. But camels, like other animals, must feed fairly regularly, although they can live some time without drinking, hence the necessity for these nomads to have pasturage for their beasts. The nomad then remains in a certain locality in the desert for as long as there is food for his camels ; he then moves on to a fresh spot with suitable feeding for his camels.

To a large extent the proximity and quality of the water in the nearest wells are of minor importance to the question of a good pasturage. The desert nomad has perforce to be a hardy creature or he would very soon die of starvation or thirst. His wants in the way of food are small and easily satisfied, while he trains himself to exist, like his camel, on little water. To a large extent he suits his life and movements to the welfare of his beast.

Now, although the southern portion of the Central Sahara is a deserted country, the greater part of the section inhabited by the Kountah Arabs and the Ouilliminden Tuaregs, viz. from the latitude of Bourem to the latitude of Zinder, is comparatively fertile in a certain kind of vegetation. This vegetation is of a peculiar kind, but includes the mimosa shrub and cram-cram grass, besides other things the camel likes to feed on. There is comparatively little space with no vegetation of some kind growing upon it. Water is scarce everywhere, and is only found in wells, but it is rare that one has to march more than sixty miles without passing a well.

For the first nine days my route lay through the country of the Kountahs. We seldom met any people, however. Occasionally, at a well, one would come across a few men drawing water, which they would load up on camels, or sometimes on donkeys, and thus transport it to their encampment, which was probably some miles distant, and generally far away from the possible tracks of a passing caravan. I suppose the mere fact of a man electing to pass his life in the Sahara is a sufficient indication that, for some reason or other, he wishes to shun other mortals as much as possible. His motive may be a criminal one, or merely the desire for a hermit existence ; whichever it is, in the case of these people, there is no doubt that they have a decided reluctance to coming into contact with strangers, unless for purposes of loot !

The route I had taken was not the shortest one to Kidal. My quickest way would have been through Kerchouel, a well almost due north of Gao, and to the east of my direction, but the guide said that this line of wells via Kerchouel was in a bad state. According to him several of the wells were dry, or had so little water as to be insufficient for even our small caravan. I afterwards discovered that the man was lying, and, for private reasons, did not wish to go by Kerchouel, for the wells there were no drier than were those on our route. It so happened that this particular year had been a drier one than usual, and all the wells were in a lower condition than usual for the time of year.

In this portion of the Sahara there is a periodical rainfall, which, of course, accounts for the vegetation being less poor than elsewhere. The rainfall consists of some three or four tornadoes, averaging possibly one or two inches in the year. These tornadoes come between the months of July and September, and it is due to them that the wells fill up. Sometimes a well, or line of wells in an "oued," fill up when there is apparently no rain that year, but this is to be attributed to the fact that rain has fallen in some far-off locality—possibly at a distance of a hundred miles—and, by some curious subterranean system, there is a connection between the spot where the rain has fallen and the particular "oued" in which the wells are situated. The whole question of where the water originates which fills up certain wells in the Sahara is a complicated and interesting one. Until all the desert has been thoroughly surveyed it will be difficult to do more than guess at the solution of some of these problems.

One article of baggage which I had brought, and which I thought would be of the greatest value in the Sahara, was my tent. When halting during the middle of the day the heat was intense. Shade was scarce, for the mimosas, the

nearest approach to trees, were at the best stunted shrubs, affording little shade. My tent, however, consisting as it did of a single fly, seemed to retain the heat to a great extent, although, of course, it afforded some welcome shade. I found the hours from 11 a.m. till 3 p.m. most trying. It was so hot that it was difficult to work, yet it was much too hot to sleep. I always welcomed the hour for the evening departure. Marching was certainly cooler than halting, and often it was less tiring.

I usually rode for the first two hours, and about sunset dismounted to rest my camel and to stretch my legs. If it was a moonlight night I used to walk for several hours, but on a dark night walking was not so pleasant. The country about here was usually open, and it was possible to march, even on a moonless night, without fear of the camels coming to grief.

It was a strange place this desert, and gave me a queer, eerie feeling. On all sides a death-like stillness prevailed; for hours, and sometimes for days, we would walk without seeing a single soul. For miles there would be no signs of animal life, then suddenly a herd of gazelle would come into view, feeding on the desert, scrubby grass, and at the sight of the caravan away they would scamper, frightened at the unwonted sight of man.

In this part of the Sahara there were a fair number of Loder's gazelle. This creature can live without water, and its habitat is always a desert country. It obtains a certain amount of moisture from the sap in certain plants and grasses, which appears to amply suffice for the little animal. The gazelle is a very pale, creamy buff colour, almost white under the belly, and stands twenty-eight inches high. It is extremely graceful, like most gazelle, and almost invariably starts its flight, when disturbed, by a series of big bounds, wherewith to gain impetus. I generally saw about six in a herd, but sometimes I have

known them to include as many as twenty. The venison formed an excellent change from ordinary diet, and was, of course, the only chance of getting fresh meat in the desert. The nomads, whom we occasionally met near a well, had flocks of goats and sheep, but would not sell their animals for untold quantities of "guinée."

Quite in the southernmost parts of the Sahara, within thirty or forty miles of the Niger, I saw a few greater bustard, and at times, when near a well, I have even seen guinea-fowl several days' march from the river. As there was no running water for them to drink at, I can only conclude that these birds used to go down the wells to drink. In the same way I saw ringdoves near wells once or twice, far in the interior of the Sahara, and have often watched them emerging from the well after having drunk. These doves, too, appear to be of a far lighter colour than the ordinary grey dove of West Africa and the Niger. The hue is a very pale slaty grey, so pale as to be almost white. In this connection it is strange to note how pale is the colour of every Saharan animal, for it seems to conform to the usual law of nature in assimilating its colouring to its surroundings, so that it is frequently very difficult to detect an animal against the white Saharan sand. The soil is, however, by no means altogether sandy. In parts of the desert here the landscape varied a good deal. After marching through many miles of sandy soil with the typical desert scrub, the scene would gradually change. Isolated hills, standing 200 feet above the plain, would appear. These hills were formations of ferruginous rock, covered with boulders, but devoid of vegetation. The ground here used to be strewn with a layer of shale, presumably broken off in a kind of flakes from the hills by the heat of the sun, and scattered over the surface by the desert winds.

I recollect one of the most trying marches on the way to

Kidal was the day we arrived at the Well of Agamhor. We had been two days on the march since the last well, and, by the guide's information and by my rough calculations, we should arrive at the well by 10 or 11 a.m. As there was no suitable place to camp for the day and get a little shade, at 9 a.m., contrary to my usual practice, I decided to push on to the well and march, if necessary, till eleven. It was one of the hottest days we had experienced, and we were marching over a rocky ridge, which radiated the heat with intense fierceness. I was rather exhausted, too, as I had had a long stalk that morning after some white oryx, before I had managed to shoot one. We trudged steadily on till long after eleven, and still there was no sign of the well. The guide then began to urge that we should halt, saying the well was still far away and we could not reach it till 3 p.m. The men and camels were fatigued and hot, so I decided to halt. Until 4 p.m. we lay gasping on the rocky, burning ground, vainly trying to get some shade. It was not possible to pitch my tent, as the soil was too hard, so I followed the men's example by lying on the shady side of two or three articles of baggage. The sun was pitiless, there was no pasturage for the camels in that barren spot, and we were all thankful to start once more late in the afternoon. We did not arrive at the well till nearly eleven o'clock that night, when both men and beasts threw themselves down exhausted, glad to stop where they lay till morning-time.

The camels after this march began to show signs of fatigue; several, too, had got terribly sore backs. These sore backs had not altogether developed on the march, for I had noticed them suffering from barely healed wounds before we left Gao. I had been assured, however, that it was very rare to get a hired camel without a tender place on his back, so there seemed to be nothing to do but accept the situation. I used to dress their wounds daily with

iodoform and cotton-wool, but it was almost as painful to me to see them loaded as it must have been to themselves. I lightened the loads as much as possible, but most of my kit had to be carried if I hoped ever to reach the other side of the Sahara, so I had to harden my heart and ignore the pain they must have sometimes endured. The Bambara soldiers, when charging a camel, are quite callous. But they do not, and I suppose never will, understand the beast. Being negroes, they are totally unconscious of the pain animals can suffer. Of course, it must be said that they are not natives of a camel country, and so are handicapped by a lack of knowledge of the beast, when they are enlisted in camel corps. I think they never quite appreciate the necessity for giving the camel a regular number of hours daily in a pasturage whenever it is possible, and they certainly are not as careful about watering him as are the nomads of the desert, who are brought up from their childhood to look after camels.

The camel is a curious-tempered animal. He seems to have the same characteristic as most desert nomads. He dislikes mankind cordially, and takes no pains to disguise the fact.

To mount a camel he must be made first to squat on the ground. This is accomplished at the expense of some time and temper, by pulling his head towards the ground by means of the string in his nostril and ejaculating frequently a soothing noise similar to what is used by a nurse when she tries to induce a baby to go to sleep. The camel at last obeys, with many grunts and "protests." The next operation is to mount. The first point is to seize the rein in your right hand and place this hand on the front of the saddle. At the same time you must seize the camel's nostril in your left hand, turning his head inwards until the nose nearly reaches the front of the saddle. Every movement on your part will call forth numerous deep

THE WELLS OF TABANKHOR

The difficulty of discerning a well in the Sahara, until one is actually within a few paces of it, is here clearly indicated. The well is rarely marked by any distinctive features, such as trees, vegetation, or any particular accident in the ground. It is merely a hole excavated in the sand, which can only too easily be missed by the traveller, possibly with serious consequences should he be short of water. The donkeys and bullock in the illustration belonged to Kountah Arabs in the Southern Sahara, and on the right are seen water-skins just filled from the well ready to be laden on the beasts for transport to the Arab encampment in the desert hard by.

A SNAPSHOT OF THE "KING OF BEASTS" AMID HIS NATURAL SURROUNDINGS

This was a lucky snapshot of a lion going to drink, on a branch of the Middle Niger. Having news of a "kill," I managed during the day to get into a concealed position near his lair. Fortune favoured me when the lion emerged from his resting-place, passing within a few paces of me on his way to the water.

growls of protest, but one soon gets accustomed to this, and takes no notice of it. When, however, you seize the nostril and pull his head round he will roar as if he were being tortured to death. It is advisable to place the left foot on the slack part of the rein on the ground, or he may take you by surprise and suddenly jump up.

Having successfully accomplished all these manœuvres, you should rapidly throw the right leg over the saddle, lifting the left foot from the rein and placing it on his neck. The camel will then generally—but not always—rise with a most disconcerting jerk, growling loudly all the while. This is perhaps the most awkward, and even dangerous, moment for the unwary novice. On rising the camel first throws his head and body forward and then backward with lightning-like rapidity, when the rider must conform by equally rapidly jerking his own body in the inverse directions, otherwise he will inevitably lose his balance and be hurled on the ground. The Saharan camel is not a well-trained animal, so it behoves one to be careful when first attempting to mount an unknown beast.

After having mounted the rider will not persuade him to cease his angry grumbles for some little time. If he refuses to rise, as he sometimes does, the only plan is to tap more or less violently with the feet on his neck; but in every case the golden rule is to have patience, for of all the brutes in creation which have been tamed to do man's will, the camel is surely the most trying. I have sometimes spent ten minutes in endeavouring to make a camel rise, when I was in a particular hurry to be off. Beating is quite ineffectual, and only serves to humble one's pride. A camel's hide is pretty tough, and he cares little for the blow from a thick stick or whip.

The camel never seems really happy unless he is absolutely left to himself. Far away from mankind, and unobserved, he eats and eats till he is gorged, and then lies

down to sleep. If man is at hand he will never eat as well as when by himself ; the presence of a human being seems to have a strange effect on him. This has been often proved by noticing the difference between camels left at their pasturage in perfect liberty and those which are guarded by men while feeding. The former regain condition comparatively quickly, while the latter, besides taking longer, will probably never return to such good form as their more fortunately placed brothers who are grazing quite at liberty. When near a man he constantly seems to sulk and not to make the best of himself. I have known camels in the Sahara, who had not had anything to eat for several days, refuse their food after being ill-treated, seemingly preferring to die than to accept any favour from the person who has beaten them.

Although camels can go several days without water, yet, when they do drink, they are gluttons for it. They drink an abnormally large quantity at a time, and will return to drink two or three times in the day until satisfied. Camels suffer a good deal from indigestion, and this is probably due to the huge quantities of food and water they consume.

It was the custom to hobble our animals at night, and I recollect how on one occasion on this march to Kidal, my plans for the next day's journey were upset by a freak on their part. We halted one night, rather tired after a long march, about eleven o'clock. The road was rough, as we had entered into a mountainous, rocky country, and it was impossible to move any further until the sun rose, the moon having just set. It so happened that there was an excellent pasturage in an " oued " close by, and into this the camels were turned after being hobbled for the night.

I awoke next morning at daybreak to find all except four of the brutes had disappeared. They had wandered off, moving, as they do when hobbled, by a series of little jumps, in the direction from which we had come the

previous evening. I sent a party to track them. They had gone back a distance of fifteen miles to our last halting-place, and were found quietly grazing there, quite unconcerned at the trouble they had given us! The incident made me lose a valuable day. It was not the slightest use to get angry, so I resigned myself to such incidents quite meekly at last. Camels will wander extraordinary distances in search of water when very thirsty. I heard of a case where two camels had gone back a six days' march to the previous well, when, had they only known it, the next well was only one day's march ahead! Usually they have a keen instinct for the presence of water, and when they have been to a well, along a certain route, they will recollect the road in a wonderful manner.

Cases of guides having lost their way, and having then trusted themselves to the memory of the camel, by allowing him to go in the direction he selects, are frequently repeated. The camel in such cases generally, although, of course, not invariably, brings the caravan safely to the well. It must be understood that this will not occur unless the animal has followed that route on previous occasions, and further, that he must in such cases usually be within a few miles, at most, of the well.

One rather unpleasant feature about these Sahara camels is the number of ticks they collect. These loathsome insects find a habitation on all camels, and are difficult to destroy.

I was advised to ride barefoot in the desert, but never could persuade myself to try on account of the fear of ticks. As I previously mentioned, the camel is here ridden with the rider's feet on the animal's neck, and I used always to wear long riding-boots made of soft leather with soft soles. If heavy-soled boots are worn the camel's neck will get chafed from the constant friction of the leather against his skin. The hair of the mane of a riding-camel is invariably

worn away on account of the pressure of the rider's feet, and a riding-camel can generally be distinguished by this mark.

Stirrups are never used with the camels of the Central and Western Sahara. All camels are trained by Tuaregs or Arabs, from whom they are bought, and these two races never ride with stirrups, but with their feet on the animal's neck. The camel is guided by the feet, and he is urged forward by repeated taps of the feet on his neck. The rein can hardly be said to guide him, and is certainly never put to this use by the desert nomads. The rein generally is attached to a ring in his right nostril, being then brought under his neck to the near side. Its chief use is to haul up the animal's head when he, in his pig-headed way, will lower it to graze against your wishes.

A camel's walk is a most tiring motion. He sways you from side to side as well as from front to rear. It is something like being in a ship when she is both pitching and tossing. I never got used to the movement, and for the first few weeks used to get painfully stiff and sore.

CHAPTER XX

An unreliable guide—Relief—Typical scenery—Game in the "oueds"—A dreary scene—The effect of the sun—A breakdown—Kidal—Reorganization—A veiled people—The Iforas—Tuaregs and Iforas—Iforas as camel-masters—Adrar—I abandon my bath—The value of dates—French couriers—A solitary post—Relics of the Stone Age—Relics of former nations.

OWING to the heat and the fine particles of sand constantly flying in the air, Sidi Mahomed, the Arab guide, became much troubled with his eyes, developing a kind of ophthalmia. I had then to depend entirely on the Tuareg guide, and it was soon evident that he was not very reliable. We were marching towards the wells of Tinderan, and on the afternoon of the 30th of April we should have arrived there. Time went on, and it began to get dark, while there were still no signs of the wells. On being interrogated, the guide, with customary vagueness, said it was only a short way off, and we should soon be at Tinderan. There was no moon that night, and I soon perceived the ground was becoming very rough; the camels began to stumble into holes and over boulders, until it seemed hazardous to proceed for fear that one would break his leg. It seemed to me that the guide had lost his way. I decided, however, not to interfere with him, as it is a principle in the desert not to harry the guide with questions, since it only flurries him. One is perforce dependent absolutely on one's guide, so it is the best policy to rely thoroughly on him and leave him alone if he seems puzzled.

As the stars became brighter in the heavens I noticed that we had altered our course from east-north-east to south-east, and gradually we began to turn still further south. There was then no doubt that the Tuareg had lost himself. I halted the caravan, proceeding to question him. He denied that he had lost the way, protesting that we were quite close to Tinderan. However, it was palpable that he must have missed his direction, so without further listening to his protests I camped where we were for the night, sending him off to find the right way, and telling him not to return till he had so done. Anyhow, it was fairly evident that he did not understand how to march by the stars, for we had turned nearly through an angle of 180 degrees, and were now with our backs to the direction in which I knew Tinderan must lie. Should he not succeed in soon finding the wells the position threatened to become serious, for we had nearly exhausted the supply of water on the camels. It was two days' march back to the last well, whither we must return should the worst come to the worst, and the strictest economy with our water would not make it suffice for that time. I resolved to keep the water intact till to-morrow anyhow, and see what news the dawn would bring. So that night we went to bed thirsty. Eventually it was not till late the following afternoon that we arrived at Tinderan, weary and parched. We had been nearly eight miles out of the true direction, it appeared, the previous night. The general sense of relief, and the men's joy at the sight of the wells, are not easily described. We had practically no water remaining in the water-skins, and what there was had a disgusting stagnant taste. The sun had been overpoweringly hot, for we had been forced to march through the heat of the day, and the sense of mistrust in our guide was universal. What feelings of relief and comfort did not these wells conjure up! Tinderan meant water to drink, a good rest

My Kitchen in the Desert

In the foreground is my servant, Musa, cooking my breakfast. At this spot we were so fortunate as to find some stunted mimosas, so that, with the aid of a rug thrown over some branches, I was able to rig up a little shelter against the blazing rays of the Saharan sun.

for weary limbs, food and sleep, and for myself, also the delights of a wash once more !

To the ordinary observer, it is true, Tinderan was hardly an attractive-looking place. It lay in the midst of typical Saharan scenery. Wastes of yellowish white sand surrounded it on all sides. Besides the wells there was, of course, nothing else at Tinderan, for that was simply the name of the wells. There were some half-dozen of them, consisting merely of holes excavated in the sand, and not discernible until one actually walked up to them. But to the desert traveller, tired and thirsty, the surroundings mattered little; the chief point, and the only point, was that here was water and plenty of it. For the time being all hardships are forgotten and joy reigns supreme.

On our march to Tinderan we had finally left the " Oued Telemsi," the dried-up watercourse along which we had been travelling since leaving the Niger, and were now on the northern confines of the Kountah Arabs' country. Just before quitting the Telemsi we had crossed two other " oueds," called Northern and Southern Eguerrer respectively. These are big shallow valleys, and must at one time have been two large streams which united south of Tinderan to form the River Telemsi. I saw several herds of Loder's gazelle in these " oueds," and shot three of them just before dusk. We had not had any meat for some days, so they were a welcome addition to our larder. It was not till the following day that I again saw some White Oryx (*Oryx leucoryx*). These fine antelope are extremely local in this part of the Sahara. I generally saw them in a locality where there was rocky ground as well as sand. A favourite spot for these animals would be a sandy " oued " with " cram-cram " grass growing in its bed, and on each side barren, rocky hills. They appear to care little for shade, feeding in the early morning in the " oued " and retiring to the rocky, shadeless hills during

the heat of the day. They invariably seemed to be well-fed and in good condition, and one cannot help marvelling at the sustenance they seem to get out of such a poor-looking diet. The white oryx is a dangerous animal to approach if wounded, for he can inflict terrible wounds with his sharp, spear-like horns on anyone who is so unwary as to come within reach of them.

On the 1st of May we passed a piece of desert rather different from anything I had yet seen. For several miles there were clumps of dead mimosa shrubs, the soil was sand, and the terrain here was very flat. The appearance of the scene was most dreary; it seemed as if this had once been a comparatively fertile spot for the Sahara, when all of a sudden the blight of the desert must have descended upon it, mercilessly killing every bit of living vegetation. The guides informed me that there had been no rain there for five years, hence the destruction of the mimosas. Although rain in the Sahara is rare, still there are not many places which are not favoured with a shower, or perhaps two, every year or every other year, and it is marvellous how this infinitesimal quantity of moisture will put new life into Saharan vegetation, making new plants spring up in a very short time. It is fortunate that this is so, for otherwise even the camel could not exist in the desert.

On the 3rd of May we saw in front of us a rocky barrier of mountains, which seemed to block the horizon to the north. These were the Mountains of Adrar, and we were approaching the Adrar Plateau, upon which was situated the post of Kidal. All the way from the Niger we had been gradually rising towards this plateau, which forms a tableland at an elevation of about 2500 feet in the south of the Central Sahara. The next two days were the hottest we experienced. The way lay over burning granite rocks, rough boulders obstructed our route at every step, while the sun beat down with pitiless vigour on our heads.

Path, of course, there was none. In the desert such a thing as a path is unknown; each caravan seeks its own road. Every guide has his own landmarks to help him, but two caravans, both destined for the same well and starting from the same place, might easily pass each other *en route* without being in view. The average temperature during those two days was 116 degrees in the shade; our throats were parched, our feet were burnt, and the glare from the blazing sun was intolerable. Up to this point I had not adopted sun-spectacles, but now I was forced to do so. I had taken the precaution to bring three pairs with me, and the relief to the straining eyes was inexpressible. The chief objection to them is that they make one's face perspire to an uncomfortable degree, and when they are removed it is difficult to see in the strong sunlight for some minutes.

Until now I had flattered myself that I was fairly well hardened to the African sun, for I had travelled through the tropical heat, in the hottest season, during the past three months, with my sleeves rolled up to the elbow and knickers cut short at the knee. Now, however, I found that my skin was as tender as a child's against the fierce rays of the Sahara sun. My face, arms, and knees got terribly burnt and swollen. I suffered tortures every time I touched them or bathed them. The skin came off, and I must have looked a very peculiar object. Even the natives' hard feet became fearfully blistered and swollen by the burning heat of the rocks. Raids on the water-skins during the march were frequently attempted, and I had to give the N.C.O. of my escort the strictest orders to keep the men from the water. If they had been allowed to drink all they wished the water supply would soon have been exhausted, and it is always a sound principle to arrive at a well with some water in your water-skins, for it is never certain in the desert that the wells will not be found dry.

Halting in the middle of the day was the time everyone disliked most, for the heat of those rocks and the lack of any shade were truly appalling. However, a halt was absolutely necessary for several hours during the day in order to give the camels a rest, so I used to stop at some "oued" where there was some parched-up "cram-cram" for them to feed on. As it was, two of the camels fell down during the march on the 4th, refusing to get up. They were exhausted by the heat. I relieved them of their loads, leaving the guide, Sidi Mahomed, to look after them, and bidding him follow as soon as they had rested. Those two camels died before reaching Kidal, and the only wonder was that we did not lose more.

A sandstorm was blowing when we arrived at Kidal on the 5th of May, about 10 p.m. I shall not easily forget my sensation of joy at again beholding a European's face after the past twelve days in the desert. What a pleasant spot Kidal seemed! Here there were actually two houses, or huts to be more accurate, built of mud. Further, there were about a dozen date palms surrounding the little post. The spectacle of real trees and real green leaves once more was most refreshing. Then, one need no longer stint oneself for water. How I revelled in a bath that evening! The water at Kidal was beautifully pure, not like some of the disgusting liquid we had been obliged to drink on the way. Almost the strangest thing was that I had been only twelve days on my journey. It seemed as if I had spent a lifetime already in the Sahara, so new and varied were many of the experiences I had undergone. The little hut allotted to me was very hot, but the relief at being in the shade, and being able to discard my helmet during the day, was great. Besides, it was cooler at Kidal. The soil was sandy and those burning granite rocks were farther away.

THE SERGEANT OF TIRAILLEURS IN CHARGE OF MY ESCORT, AND MY TWO GUIDES TO KIDAL

Three distinct types are here depicted. On the left a white-bearded Arab of the Kountah tribe, whose handsome face and picturesque garb make him a fascinating figure. In the centre is the sergeant of my escort, a stalwart Bambarra with the distinctive thick lips and snub features of the negroid races. The third man is a Tuareg, one of that curious tribe which wanders in the Central Sahara, shunning contact with the rest of mankind to an extraordinary degree.

I did not leave Kidal till the 8th of May. I had to reorganize my caravan here. The officer in charge of the post had fortunately been able to retain the services of a guide for me, and the same man was willing to let me his camels if we could agree as to terms.

The day after my arrival I had an interview with Mohamed Ben Kaid Kaddour, as the guide was called. He was an Arab trader who did business between Insalah and the Adrar country. He had not intended to return to Insalah till the cool season commenced, about September, but owing to some urgent private affairs he had just been recalled to the northern part of the desert. The man was a shrewd Arab, about thirty years old, a keen trader, and with the reputation of being a sure guide in the desert. The opportunity was a good one, so I decided to take it at any cost, for, owing to the time of year—it being the hottest part of the hot season—no caravans were travelling, and I should be extremely unlikely to get another guide to take me.

After a good deal of bargaining matters were settled. I hired four baggage camels and one "mehari," or riding-camel, from Mohamed, who agreed to furnish one camel driver for the party and guide me safely across the desert to Insalah for a sum amounting to about twenty-three pounds. I naturally stipulated that he should not be paid until the end of the journey. It seemed to me a good plan to hire the camels from the man who would act as guide, for in this way he had more interest in keeping them in good condition. It was to his advantage to get them fit to Insalah, but certainly I was rather in the hands of my guide should he prove unscrupulous. If he wished to make away with me *en route*, and abscond with my despatch box and baggage, it might be hard for me to prevent it, and it would be difficult for the authorities to catch him and punish him for his crime. However, I was determined to be very

wary, always sleeping with one eye open and my fire-arms close beside me.

The other member of the caravan was my servant Musa, while the guide asked permission to bring four camel loads of merchandise and a young camel he wished to sell at Insalah.

At Kidal I saw some of the finest camels I had yet seen ; these belonged to the detachment stationed at the post, and had been bought from the Ifora Tuaregs. These people breed a very fine class of " mehari," their riding-camels being renowned for their power and endurance throughout the Central and Western Sahara. The Iforas are the Tuaregs who wander in the Adrar country, and it was at Kidal that I first came into contact with this interesting race of nomads.

The chief peculiarity of these people is that they always wear a veil over the lower portion of their faces, which conceals all the features except the eyes, and sometimes the ears. This veil is made of blue stuff, generally of the well-known " guinée." It is called a " litham." The use of a " litham " is obvious to anyone who has travelled in the desert, for it serves to prevent the wearer from being choked by the clouds of sand which are ever blowing about in the Sahara. Moreover, it prevents thirst to a remarkable extent. It is a most essential article of kit for the desert traveller, and I soon found myself obliged to adopt it. I often used to think that my appearance in a civilized country would have caused some astonishment and, probably, not a little merriment. My face was so swathed in strange objects that very little of it was visible. I think I might fairly have beaten a motorist in the strange disguises on my features. My eyes were hidden beneath huge blue sun-glasses, while the remainder of my face was entirely obscured by the " litham." which, in my case, generally consisted of a handkerchief. I found the same

objection existed to the "litham" as to the glasses, but that was quite a minor discomfort, and one very soon forgotten.

The Iforas share the usual dislike of the Tuareg to contact with mankind, and with Europeans in particular. They possess an unenviable reputation as first-class looters and highwaymen. A weakly guarded caravan passing through certain parts of Adrar runs a very good chance of being attacked and looted. But in this respect the Iforas are by no means the worst offenders amongst desert tribes. They are said to be plucky in war, but will avoid fighting when possible.

They are intensely jealous for their womenfolk, and are stated to be ready to die to a man rather than allow their wives and female relatives to be harmed. The Iforas have two distinct classes—the Ihaggareen, who are the nobles and govern the various clans into which the tribe is split, and the Imrads, or middle class. All menial work is done by slaves, called "beylas." These slaves have been captured at various times from various negro tribes during Tuareg incursions into the Niger country, or else when a caravan has been plundered.

Iforas are armed with spears, swords, and shields. They dislike a rifle, and seem to regard it with a strange mixture of contempt and fear. The swords are of two kinds: one is a cutting sword worn at the side, and the other, called a "tellak," is about twelve inches long, resembling a dagger, and is worn on a leather band on the left forearm, just below the elbow.

The shields are about six feet high, made of bullock or sheep hide, and are sometimes rather picturesquely painted with strange devices on the middle of the front face.

Tuaregs live in encampments, their tents being made of a number of goatskins sewn together. Or they may erect temporary shelters made with bits of mimosa branches,

over which is stretched a cloth. It is extraordinary the number of people that one of the tiny shelters will accommodate. A family of father, mother, and four children will in some marvellous fashion find space in one about fifteen feet long by ten feet wide, while the height of the structure is not more than four feet.

Tuaregs are rather a handsome race, and the Iforas are not behind their fellow-tribesmen in this respect. They are usually tall and slimly built, but very wiry. They have well-cut features, blue eyes, and a pale complexion. The language is guttural, not bearing any resemblance to Arabic, which is spoken on the north, or the Niger languages on the south. The origin of these people is shrouded in mystery. Tradition says that one of the Tuareg tribes, probably the Ouilliminden, who are nomads in the Sahara on the east of the Ifora, came about the seventeenth century from the Erg-Iguidi, a tract of desert in the north of the Sahara, under the leadership of their chief, Kari Dena, in search of adventures. The date appears to correspond with the time they conquered the Sonrhais and invaded the Niger provinces near Timbuctu, but it is difficult to establish the authenticity of this legend, for the people are extremely reticent about themselves, and it is doubtful if they know much of their past history. In any case, it seems probable that before they became desert wanderers, they lived in the northern part of Africa, and were probably conquered and expelled from their country by the Arabs, being thus induced to seek a fresh home in the south. After their stronghold, Timbuctu, was finally wrested from them, they migrated more than ever to the desert, hence their poverty and dislike for close acquaintanceship with mankind.

Iforas are wonderful camel-masters. They understand more about these animals than anyone in the Southern Sahara. Besides, they can identify a camel in a most

MÉHARISTE CAMELS OUT AT THEIR PASTURAGE NEAR KIDAL

The vegetation in the illustration is typical of that found in the Oueds of Eastern Adrar. It is strange how even these arid-looking grasses can exist in the Sahara, but Adrar is fortunate in getting several tornadoes annually and is consequently richer in vegetation than other parts of this desert. In this pasturage there were some seventy or eighty camels wandering in complete liberty, scattered over some ten square miles, resting and putting on flesh after some arduous months' marching this troop had recently performed in the desert.

accurate manner by observing his tracks in the sand. I have known cases of a Tuareg, on observing the tracks of several camels at a well, stating that such a one was the track of such and such a man of his tribe, and that he had been there three days before our arrival. On verification, all these details proved to be exact. Iforas are not often at fault in the matter of tracking by the marks of camels' feet in the sand. They will tell you, correct almost to a man, how many a certain caravan numbered; and when it is recollected that camels usually follow each other in single file, it will be understood that this is no easy matter. Besides, the terrain is often hard, so that to the casual observer there are no tracks whatever discernible.

The Iforas own large flocks of sheep and goats. Some of the former are fine animals when the difficulties of grazing are taken into consideration. These Tuaregs take great pride in their flocks, and the principal trade between them and other tribes of the Sahara consists in sheep. Their movements are entirely dictated by the state of the grazing in the "oueds" for their camels and sheep. Sometimes I have noticed a Tuareg encampment as much as seven miles from the nearest well. The encampment is made here on account of good grazing being available. The fact of having to go seven miles to the well and seven miles back for his water has no importance for the Ifora. He drinks little himself, while his sheep are driven to the well every third day to water, and at the same time water-skins are filled and brought into camp on camels. The state of most wells in the Ifora country is for this reason often disgusting. The flocks, when being watered, are allowed to foul the wells, so that, for a couple of days after their visit, the contents are almost undrinkable.

This country, which is really the Eastern Adrar, is generally known as the Adrar of the Iforas, to differentiate

between it and Western Adrar, a country in south-west Mauretania, and Adrar Oasis in the Northern Sahara. The word Adrar merely means mountain in the language of the Tuareg.

The plateau of Adrar is about 200 miles long and seventy wide. It consists generally of rocky hills running in parallel ranges from north to south. In certain parts the granite rock has been split up by the action of the heat, leaving isolated jagged crags which stick up in fantastic shapes. The valleys between these hills usually possess pasturage for camels and sheep, for Adrar of the Iforas is on the whole a well-watered country; that is to say, it boasts of periodical rains, which consist of some six or seven tornadoes in the year. The Iforas for this reason are more fortunate than many nomad tribes of the desert, who have to seek much farther afield for a change in their grazing-lands. The valleys in which are found the "oueds" are generally sandy bottomed, in sharp contrast to the rest of the country, which is rocky. Roughly speaking, such was the nature of the country through which I was going to march for the first portion of the way to Insalah.

At Kidal I at last resigned myself to parting with my travelling bath. It was a great wrench to have to discard this luxury, but I had, by bitter experience, found out that it was not a practical article in the Sahara. On the way from Gao I had only on two occasions been able to indulge in the joys of a tub, owing to the scarcity of water in most of the wells. Moreover, the bath was a most cumbersome load on a camel, and more than once had it suffered a severe fall, when some infuriated beast had managed to rid himself of this troublesome piece of baggage by dint of repeatedly rubbing against his companions, while kicking and wriggling at the same time. The net result of all this was not only damage to the bath, but probably a sore

back for the animal. So I presented the bath to my host as a slight return for his hospitality to me.

At Kidal I managed to buy a sackful of dates from an Arab trader who was doing a little business with the soldiers of the detachment. These dates were invaluable on the march. They are very portable and nourishing, although hardly appetizing. Indeed, I ate so many dates in the Sahara, and generally dates of the coarsest quality, that I hate the sight of a date to this day. My dates were packed together in a bag, crushed in a solid, consistent mass. They were so hard that many required a hammer to break them. I found the best plan, when there was not time to cook them, or no water, was to simply suck one at a time. If I tried to bite one it might easily break my teeth, so I gave up trying. In any case I was very glad to be able to buy dates here, for my stock of provisions, except the "couscous" and rice, was growing beautifully but rapidly less. Of "couscous" and rice I had plenty, but I had not yet got to the stage of being content with only these simple forms of food.

Before starting on the second stage of my desert journey I had thoroughly to overhaul my pack-saddles and the gear appertaining thereto. I had now gained some experience of the Sahara, and knew better the parts of equipment that were most likely to get strained. I also took the precaution to have a large reserve of ropes, girths, and such-like articles. My water-carriers were nearly all in bad need of repair, and this was a point requiring careful attention. A good reserve of these water-skins was essential.

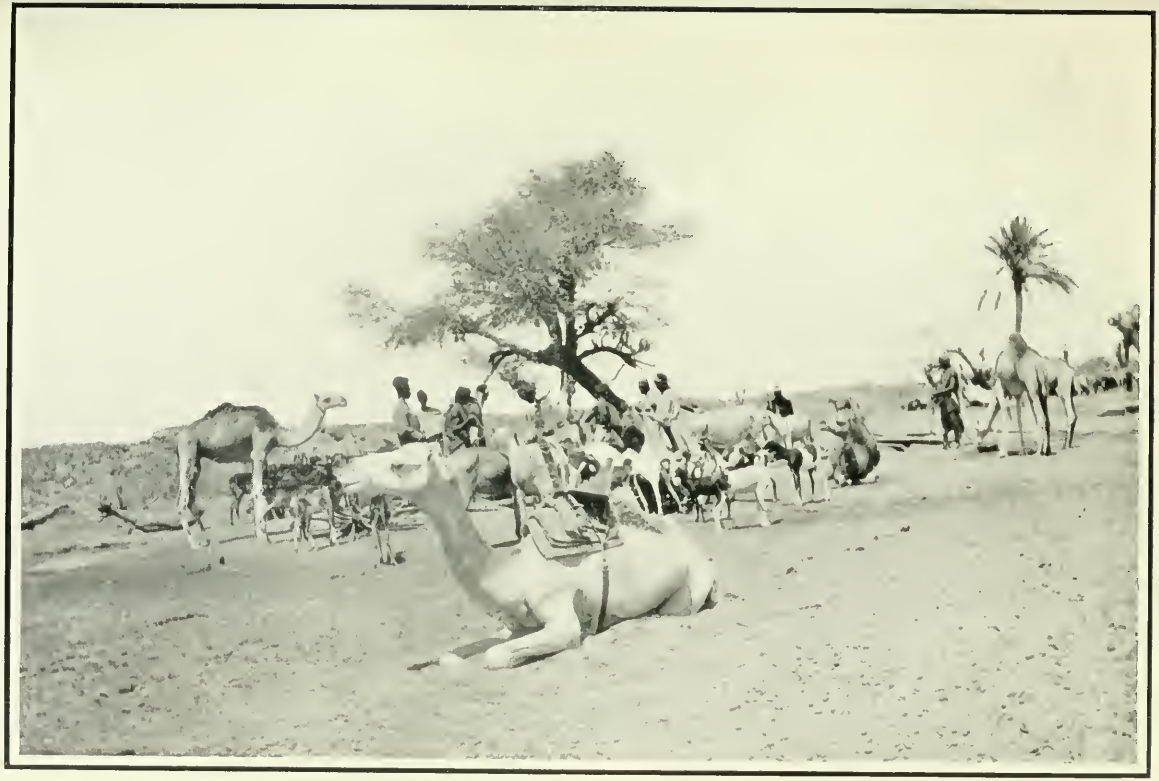
The French have now a courier who goes at stated times from Kidal to Insalah and back. The next courier was to take word of my approach to the Commandant at Insalah, so that he might expect my arrival about the beginning or middle of June. This courier is a Tuareg,

who has been procured with some difficulty to carry out this service. He travels alone, for it has been found that he is less likely to be interfered with if he does so. His mount is a swift-trotting camel, and in the dry season he has a spare mount as well. I was informed that the mails were rarely looted, as, of course, there is nothing of any value to a desert highwayman in a mail bag. His efforts would be more likely to be directed to stealing the camel than the mails, but one individual well mounted has a good chance of escaping in such a case.

The mail man followed a different line of wells from my proposed route, so I was unlikely to see him on the way.

On leaving Kidal I dare say my host pitied me at having such a long, lonely journey in front of me. For my part I could not help pitying him far more, for I was embarking on new and possibly stirring experiences, while he, poor fellow, was all alone as far as Europeans were concerned, tied down for two years of duty in one of the most dreary of French military posts. He had his work to occupy him, it is true, but how monotonous must continual service in a Saharan post be, more especially when a man is the only representative of his race within nearly 200 miles. Far away from kith and kin, living in a region almost apart from what is known as "the world," where life is hard, food scarce and bad, and surrounded on all sides by the barren wastes of the desert. His life was not without a large element of danger, moreover; for a well-organized marauding band might easily wipe out his small detachment, and the news would not reach the Niger until the raiders had made good their escape. But perhaps it was this element of danger which lent some excitement to his life and made it more tolerable. I must freely confess that he was a young man who enjoyed capital spirits, and was as cheerful and versatile as is usual with his countrymen.

After leaving Kidal on the 8th of May, my route lay



THE WELLS OF KIDAL

About every third day camels are brought to the wells to drink. In the hottest season these animals can, if well trained, exist eight to ten days without water, but they rapidly lose their powers of endurance after the third or fourth day. The camel standing up, on the left, has just arrived from a long desert trek; it will be noticed how his ribs stand out. The camel squatting in the foreground, on the other hand, has drunk his fill, as is, indeed, indicated by his big barrel and general air of contentment.

almost due north for a considerable way. Wells were on the average fifty miles apart on this stage, that is to say, through the Adrar of the Iforas; but some of the wells had so much potash in them that the water was quite undrinkable.

The southern portion of Adrar affords some interesting relics of the Stone Age. The wells have probably been in existence for many centuries, and at one or two places we found some curious little stone implements, such as arrow-heads, miniature axes, etc. There seems to be no doubt that all this country must have been inhabited at one period by a sedentary population, thus further strengthening the theory that the Sahara was not always the barren waste it now is. In the neighbourhood of Es-Souk, some eighty miles north-west of Kidal, there are unmistakable evidences of much later civilization. Ruins of buildings are there found in the sand. This place is supposed to have been one of the northernmost parts of the Sonrhay Empire, as late as the twelfth century. Mahomed told me that he had on a previous occasion found stone implements near one of the wells in Southern Adrar, but he had, of course, not taken much interest in the discovery or pursued it any further.

In the country between the Niger and Southern Adrar one occasionally observed tumuli, with remains of pottery, and I had been told, although I had myself never seen any, that granite and porphyry pestles and grindstones had been found, with similar evidences of vanished villages.

It is easy to conjure up pictures of former nations inhabiting prosperous townships in this portion of the Sahara in olden times, when the conditions were probably so different from what obtain at the present day. How strange it is to think that this vast stretch of country should now be turned into an arid desert. Instead of a nation dying out as it became effete, in this case it was the land

which, for some unknown causes, became so unproductive as to be a country in which man could not settle for any length of time, and he was therefore forced to withdraw to more promising lands. When all the " oueds " flowed, as presumably they must at one time have done, the Adrar must have been a well-watered land, as must also the whole region between the Niger and the Ifora country. To all intents and purposes the Sahara is now a dead world, and although many theories have been started, and experiments tried, for reclaiming small portions of it, it can hardly be said that, so far, they have met with much success even in the circumscribed limits in which they have been given the most exhaustive trials. However, something new in science is always being done, and is it not possible that one day this dead world may be made to live again ; that by some ingenious process water may be made to flow once more in dried-up " oueds," and that the country may be refertilized and repopulated ?

CHAPTER XXI

The camel's reserve store—Variations of temperature—The Sahara by moonlight—Halley's Comet—Wells of Abeibera—Tea in the desert—Difficult bargaining—Enduring donkeys—Saharan game—A dry well—Missing camels—In Ouzel—An indifferent boundary—Unpleasant recollections—A change in the desert—Saharan shrubs—Welfare of the camel.

THE camels I had now were far superior animals to those I had previously hired at Gao. I had particularly stipulated for animals in the best of condition. Our lives might depend on the state of the camels on this long trek across the Sahara to Insalah, a distance of about 950 miles. Besides, this portion of the desert was a much more serious affair than the part traversed between Gao and Kidal; it entailed crossing a very large tract with exceptionally limited resources, even for the camels, and a region, called the Tanezrouft, in which there was no water for a distance of 200 miles. Should our camels fail us in the middle of this great waterless tract we should indeed be in a sorry plight. I therefore was most careful to see that on starting our camels were as fit as could be expected for the time of year. They were fat and had big humps, both of which are unmistakable signs of good condition in a beast. The hump is the reserve of fat in a camel. When he is in his pasturage he first of all begins to put on flesh, and after this he puts on fat in his hump, which until now has been small and flabby. The hump gradually increases in size until it has swollen to the normal dimensions for an animal in the pink of condition. When

a camel is on the march, even when he is getting plenty of good grazing daily, he draws to a certain extent on his hump, which diminishes slowly in size as he uses up this reserve. When a camel is without food on the march, as sometimes happens for short periods at a time, the reserve contained in his hump is drawn upon entirely to keep him going, and this gets expended very rapidly. As his hump gets smaller the camel loses condition rapidly, every day his powers of endurance are diminished, until eventually he can no longer march at all and dies.

The first part of our march, lying as it did through the comparatively productive regions of the Adrar, entailed no great hardships on the camels of the caravan. There was good pasturage available every day, and every third day we could be sure of coming to a well, where the camels could drink; but in spite of all this, in a few days it was noticeable that one or two were deteriorating in condition. This was probably due to the heat. The time of year was now at its very hottest. In the vicinity of the tropic of Cancer from the middle of May to the middle of June the temperature is at its highest, and the sun's rays are more powerful than at any other time of the year.

In consequence of the heat I did a good deal of marching at night. The hours of march were usually from about 3 p.m. to 10 or 11 p.m., and then a halt and sleep till 4 a.m.; after this we used to march till about 10 a.m. Marching hours, however, perforce varied with the state of the country, and the necessity for having the light of a moon or not.

During the midday halts I had given up pitching my tent, for it usually took too long as so few men were available to do it; also it was decidedly hot in a tent, and I found it often cooler under a ledge of rock or mimosa bush when these were at hand. The nights were always pleasant, and sleeping in the open was very agreeable; indeed, it

used to get quite cold at 2 or 3 a.m., and I found that my two thick blankets were quite insufficient to keep me warm. The variation in temperature was very great. Between midday and midnight there was frequently a drop of 60 degrees.

When marching by moonlight the scene was indescribably beautiful. The white sand of the "oueds" in which we were walking was lit up to look like a white sheet by the brilliant moonbeams; on all sides of us was this dazzling sheen spread over the surface of the ground, while in the distance one might have fancied there were the waters of a lake, so silvery crystal did the sand appear. The rocky hills on the east and west caught the glint of the moon's rays, standing out sharply defined against the deep blue of the starlit sky. The jagged peaks, which were perhaps succeeded by a rugged ridge, running thus for miles into the far-off horizon, looked for all the world like the towers and crenellated battlements of some ancient fortress. The grandeur of the sight filled me with a sense of awe, and how many times did I not deplore my inability to sketch. I used to enjoy walking on these moonlight nights, gazing at this beautiful scene as we wended our way in silence through the desert—the stillness being unbroken even by the noise of a camel's footfall on that sandy surface. On such a night the Sahara loses half its terrors. The arid nature of the landscape is concealed under the cloak of night, and softened by the gentle rays of the moon.

Even when I was walking it used to get quite chilly towards midnight, and I longed for the comforting warmth of my coat, which had been stolen some time previously.

It was about 10 p.m. on the 8th of May, the day that I left Kidal, that I first saw Halley's Comet. For many nights subsequently it was visible in the eastern sky, a beautiful, bright, luminous body with a long tail, like a streak of fire, stretching for some distance behind it.

What millions of people in the world must have been watching it about this time, although I doubt if many had the opportunity of seeing it from the Sahara.

On the 12th of May we were at the wells of Abeibera, when two men, with faces concealed in "lithams," rode up on camels. They had the appearance of having journeyed far, and it is an unusual thing to encounter strangers at a desert well, so that I sent Mahomed to inquire their business and whence they came. The guide came back in a great state of excitement to say these people were traders from the Oasis of Touat in the north, and were now on their way to Kidal. His excitement was chiefly caused by the fact that he knew the leader of the caravan. The latter, who was an Arab, came up to salute me presently. He had lost several camels on the way on account of the excessive heat, but his route had lain considerably to the west of the direction we should take, so he could not give any information on the state of the wells we should pass. He had halted his caravan some distance from Abeibera, and was sending in his camels to water the following day. He was a very weather-beaten desert man, was this trader. I suppose he must have been about forty years of age, although he looked more like fifty, so tanned by exposure and lined was his face. His caravan was laden with dates, and he was going to exchange these for sheep and ostrich feathers. They would probably stay at Kidal till September before returning to the Touat.

The arrival of the Touat party was the signal for much tea-drinking. The Arab in the desert is extremely fond of tea, which he drinks with a great deal of sugar and, of course, without milk. Mahomed generally made his tea in the English fashion, but the usual manner amongst Arabs is to put the tea, which is very strong and green, into a saucepan and stew it. The tea is thus allowed to stew and simmer for about twenty minutes. The result

is a very bitter, and to my mind unpleasant, tasting concoction, which has a very upsetting effect on the nerves.

One virtue possessed by these desert people is that they do not drink alcohol, nor do they, as a rule, smoke. They have wonderful powers of endurance, existing on a mere handful of dates as their daily ration, and drinking nothing but water or tea. Moreover, they drink very little water. Frequently an Arab will be quite satisfied after a long hot march to wash his mouth out with a small quantity and drink nothing at all.

While tea-drinking and merriment was going on by my little camp, a party of Ifora Tuaregs arrived with their flocks of sheep to water at the well. Accompanying these men there were also a number of camels, so that the scene at the well was an unusually animated one for the Sahara. I tried in vain to purchase a sheep, or even a little milk, from the Tuaregs, but nothing would induce them to part with either. I showed them one by one my articles of merchandise, but they would not be tempted. First the salt was exposed to view, and they were told they could have a large lump, which was really worth three times the sheep, but they refused to look at it, with a fine display of scorn. I next produced a tempting bait of "guinée," but this likewise was ineffective, although they did show a mild interest in the stuff. When, however, my last remaining head of tobacco was laid out to view, I thought that at last I had caught my fish, and it only required a little careful playing before it could be landed. Their eyes glistened at the sight of the tobacco, and I heard many whispered exclamations of excitement. In the end I am sorry to say it resulted in disappointment. They went away muttering something to the effect that they would rather keep the sheep than take what was offered in exchange.

Money has no value with the Tuaregs. Any trade is

always done by barter, and the chief articles of barter are salt and "guinée," but, in any case, they are difficult people with whom to drive a bargain, and it is rarely that a European can induce them to part with anything.

In this part of Adrar, where wells are not more than two days' march apart, the Iforas possess donkeys. These donkeys are most wonderfully enduring little beasts. They are trained to go two or even three days without drinking, and exist on what herbs or grass they find by the way as they march.

My caravan from Gao had a donkey attached to it, which never ceased to fill me with admiration. Its Tuareg master had laden it with a water-skin, which must have weighed about 60 lbs., and in addition to this it used to carry him for the greater part of the march. It only got a drink when we arrived at a well, while it used to snatch at mouthfuls of food if anything came in its way on the march. This little creature was not more than three feet high, so it was an amusing sight to watch the long-legged Tuareg seated on its back, with his legs nearly touching the ground as it walked. It used to take tiny, quick steps, always keeping pace with the big, slow strides of the camels.

Having found a fellow-countryman, Mahomed was most anxious to stop the night at Abeibera, but I was firm, and insisted on continuing our journey at the usual hour that afternoon. It was the following day that I saw the last herd of oryx. Between the wells of Abeibera and Bourassa there was a fair amount of Saharan game. Loder's gazelle was the most plentiful, but here, also, I got two addax besides an oryx. The country was now getting much wilder in aspect. The rocky ridges on our flanks were higher, "oueds" were less sandy and more strewn with boulders, while, at Bourassa itself, the hills on the east must have been at least 500 feet above the

plain. My calculations made the height of Bourassa 2330 feet, so that the hills here were about 2800 feet high.

At Bourassa we took two days' water in the water-skins, as the next well, called Taoundert, was only some forty miles away. The country was growing wilder every day, and pasturage for the camels was less and less plentiful. On the 16th, having arrived at Taoundert, we found the well quite dry. There was not even a cupful of water to be got out of it, and we had another two days' march to the succeeding well, In Ouzel. There was very little water now left in the water-skins, so I determined to push on as rapidly as possible and reach In Ouzel with the greatest despatch the camels were capable of. But disasters seldom come singly, and the lack of water was not going to be the only trial the next two days. Halting only an hour for rest at Taoundert, I pushed on that night. It was imperative to reach In Ouzel as soon as possible, there was very little water left in one of the water-skins and nothing at all in the others ; besides, this water-skin was losing the precious liquid drop by drop as we marched, owing to the usual leakage from these articles.

The camels, on the march, were always tied in single file, one animal's tail being attached by a string to the next one's lower jaw. The order of route was, in front the guide and myself, in the centre my servant Musa, and in rear the camel-driver. It was necessary to have someone in rear, for sometimes a camel would break his string and wander away from the rest of the caravan. We had been marching about six hours when I happened to drop back for a short time. I noticed, to my dismay, that two camels, those carrying my food supplies and luncheon-basket, were missing. The camel-driver, a very sleepy Arab boy of the name of El Bashir, had mounted one of the animals in the middle of the caravan and was calmly

sleeping on his beast. There was no sign of the camels, and it was impossible to say when they had strayed.

I could not afford to lose those camels, for they carried all my provisions; at the same time it would have been madness to delay the whole caravan when water was so scarce and time so precious. The remaining water was divided into two portions, and half was given to El Bashir. I threatened him with all sorts of penalties should he dare to return without the lost camels, and sent him off to look for them, while we proceeded on our way to In Ouzel. Next day our water was finished, and at midday I made a frugal repast off the reserve ration I kept always in my haversack. The meal consisted of a handful of dates and a little "couscous." I shall not easily forget the experiences of the next twenty-four hours. We were all without water, and my "boy" and I were without food. Mahomed offered me some of his dates, but I was prouder than my servant Musa, and declared I was not hungry. The heat seemed more overpowering, and the desert seemed more deathly still than ever, during that time.

Our throats got parched and our tongues began to swell from the heat and thirst. How we longed for the sun to set, and the cool of the evening to relieve us a little from some of our torture! But that night there was no time to rest, we must march on in spite of our fatigue. This was a time when rest for ourselves or camels was not to be thought of, so we trudged wearily on. When the following day we arrived at In Ouzel we were all thoroughly exhausted, and the craving for water was something pitiable. Even that hardy desert wanderer, Mahomed, rushed to the well as soon as it came in sight, hastily lowering a small leather vessel at the end of a rope and drawing it up full of water. I must own that I was relieved beyond expression to see the water, for I had had a horrible fear that, perhaps, this well too would be dry. I had not

SHEEP AT THE WELLS OF BOURASSA

When we halted at these wells the Tuaregs were bringing their flocks down to water. It was pitiful to see the unfortunate animals endeavouring to get shade behind the trunks of some leafless trees in the vicinity. The weaker beasts fared even worse, having to be content with such shade as they could find under the shadow of their stronger brethren who had usurped the best places.

TUAREG HOVELS AT IN OUZEL

These miserable shelters consist of a few sticks supporting some goatskins and ragged cloths. The inhabitants have to crawl in on hands and knees; nor is there standing-room inside. They are frequently blown down by the terrible sandstorms which rage constantly here, but possibly their very lowness safeguards them to some extent from destruction by these hurricanes of sand.

let my thoughts dwell too much on this possible eventuality, for the consequences would have been too serious to contemplate. Another fear that had crossed my mind was that Mahomed might lose the way. Fortunately, all came right in the end, and even the lost camels turned up that evening. Somehow I did not seem to feel my hunger so much after we got to the well of In Ouzel and I had satisfied my thirst, but when the camels did arrive I soon realized how hungry I really was. After this experience I determined not to trust El Bashir to do rearguard on the march, and in future I always put Musa there when I was not in rear myself.

After the trying times of the last two days both the camels and we were greatly in need of a rest, and so it was decided to halt for three or four days at In Ouzel. This was all the more necessary as the next stage of our journey would take us through the Tanezrouft, and to attempt to cross this inhospitable region with inferior camels would be madness.

We had now passed the rather indefinite boundary between the portion of Sahara under the jurisdiction of French West Africa and that part of the great desert which came under the sphere of the Governor of Algeria. The boundary lay between Bourassa and Taoundert, running approximately along the 21st parallel. The country in which we now were was no longer the land of the Ifora Tuaregs. It was uninhabited except for short periods in the year, when suitable grazing might be found for a small number of camels. At such periods a heterogeneous collection of desert nomads used to make it their temporary head-quarters. These might consist of a small caravan of Arabs and a few Tuaregs of the Hoggar tribe. The latter belong to a mountainous desert country lying to the north-east of In Ouzel.

When I arrived at In Ouzel there were some half-dozen

of these people still there, although the time of year was not any longer favourable, and they were already preparing to leave. As nearly all the pasturage had been eaten up, there was not much left for our sorely tried camels, and in any case a couple of them appeared too exhausted for further marching until they had had a long rest. Mahomed said he thought the short halt we proposed to make would be sufficient to get the remainder of the caravan in marching trim, and we arranged with the nomads just departing for the hire of two suitable baggage camels to replace our jaded beasts. The new camels were indeed a great acquisition, for they had been in their pasturage for the past three months, were now in good condition, and boasting of fine big humps.

My recollections of In Ouzel are the reverse of pleasant. I pitched my tent on an open space not far from the well, and close to a dead mimosa, from which I vainly hoped to get a little shade during the day. Musa rigged himself up a kitchen with the help of some articles of baggage with one of my tarpaulins thrown over them, while all the remainder of my kit was stacked in view of the tent, as robbers have always to be feared in the desert. Things appeared fairly ship-shape, and I was looking forward to the rest at In Ouzel, but the day after my arrival I had an attack of fever which laid me on a bed of sickness. It was at this moment that my troubles began. From that day until our departure we had a series of terrible sand-storms.

My tent was blown down right at the commencement, and the force of the wind was so terrific that attempts to pitch it again were hopelessly futile. Clouds of sand enveloped my bedclothes and myself. The suffocating heat of the desert air was intense, while the sand choked anyone who dared to open his mouth for an instant. My temperature went up rapidly and refused to come down.

When Musa tried to give me a glass of cold tea or water it immediately became filled with sand. I used to hide my head under the bedclothes in desperate efforts to keep the sand-laden air from buffeting my face. In all my existence I do not think I have ever experienced such a miserable time as I did at In Ouzel. Eating, drinking, and sleeping were impossible, and all the time the fever racked my limbs and made my head throb till I thought I should go mad. I had long since discarded my mosquito curtain, so I had not even that to ward off some of the penetrating clouds of sand, although in the gales that were blowing I hardly suppose it would have been much use, even supposing it had not been torn to pieces immediately. Mahomed was most solicitous, but there was nothing he could do for me. It was not till the evening before our departure that the fever left me, and I was glad to get out of my bed of sand, feeling very weak and shaky.

The nomads encamped here seemed to me to lead a remarkably wretched existence. Both Arabs and Tuaregs lived in tiny hovels made of mimosa branches with grass roofs. The doorway was so low that the occupant had positively to crawl in on hands and knees. The structures were so frailly put together that they were continually being blown down by the sandstorms, but possibly the low height of the hut made it a little less susceptible to the wind than it would otherwise have been. Some of them boasted of an additional covering of a few ragged goatskins. Inside, the state of dirt and squalor was repulsive. I suppose that these desert people naturally wash little on account of the scarcity of water in the Sahara; certainly cleanliness is not one of their chief attributes.

At In Ouzel they owned a few wretched-looking sheep and goats, but the marvel was that even these could eke out an existence on the poor nourishment available. For

them there was nothing but an occasional small tuft of coarse, dried-up grass. It was rather a pathetic sight to watch them grazing on it.

In the early morning they were led out by the shepherd across the undulating sandy surface of the desert, in search of food, and when one animal, more fortunate than the rest, espied one of these tufts he would start gobbling it up as quickly as he could. It was seldom, though, that he was allowed to have his meal to himself, for a number of his fellows would scamper off to dispute possession with him.

Another sight, which would be humorous if it were not so pathetic, is to see these animals in the middle of the day trying to get a little shade from the blazing heat of the sun. The strongest of the flock will take up a position behind the trunk of a mimosa shrub, whereupon the remainder of the party attempt to benefit by crowding close up to him, one behind the other, until there is a long tail of these animals, huddled close behind each other, trying to get some satisfaction out of the shelter obtainable from the shadow of the sheep in front.

At In Ouzel the character of the desert had changed considerably. Here was more the popular conception of the Sahara, and rather what I had myself imagined it always to be.

A soft white sand covered the landscape on every side. At each step one sank into it for a depth of about a foot. The ground was undulating, and occasionally sand-dunes, rising to a height of as much as a hundred feet, were to be seen. Beyond the sparse grass no vegetation of any sort existed within sight of In Ouzel, but, in some of the more sheltered " oueds," lying to the east of the well, was a tall shrub, with leaves somewhat resembling the Scotch fir. This was the plant on which the camels fed. It is called " ethel " in Arabic, and is fairly common in the Northern

MY RIDING-CAMEL IN THE SAHARA

This picture shows my camel ready to be mounted after a midday halt, during which I had endeavoured to get some shade from a leafless stunted tree. My saddle was a Tuareg "rahla"; these are made with a curious cross in front. All the paraphernalia of the march is hung ready on the saddle, e.g. rifle, water-bottle, haversack, and camera. My ammunition I used to carry in a bandolier slung round the shoulder.

Sahara. I had not previously seen this desert shrub, but this, I fancy, was due to the desert soil I had hitherto encountered not being suited to its growth. The " ethel " appears to require a soft, sandy soil; at any rate, I never found it growing except in this particular kind of ground. " Ethel " shares with other Saharan flora the peculiarity of possessing thorns, or rather, in this case, spikes. It is a curious fact that every herb, plant, or tree in the desert seems to have some kind of a thorn growing upon it. The spikes on the " ethel " are perhaps less strong and hard than in the case of most other Saharan vegetation. It is rather strange how the camel eats these thorny morsels without apparently suffering any inconvenience therefrom. By a peculiar motion he seems to compress the thorns between the roof of his mouth and his tongue and tear them off. The " cram-cram " grass, of which the camel is excessively fond, and which is far more nourishing than the " Ethel," was no longer to be seen. On quitting the Adrar we had left it behind. It does not appear to exist north of that country at all.

In the Sahara there are two kinds of plants, generally speaking—plants which do not die if they get no rain during the year, and plants which only spring up annually if there has been rain. The former species is rather interesting on account of the following peculiarities. After rain it sprouts forth new branches or sprigs, and usually remains fairly green for three years, after which it will dry up, but not die, and will still afford nourishment for camels for several years, gradually fading away, and finally dying if it does not get any rain for a period of seven years. These periods—three and seven years—are necessarily not exact in every case, but this is said to be the average. This fact, of course, accounts for pasturage being found in parts of the Sahara where it has been known not to rain for a considerable time.

The latter species, viz. the plants which only spring up annually if it rains, are known to the Arabs by the general name of " acheb." It is said that to give life to one of these plants a heavy shower of rain at least is necessary, and that the soil must have been saturated for a depth of about four inches. The characteristic of the " acheb " is that the seed never seems to die. It merely rests in the ground, waiting for the requisite fall of rain to spring up. The locality may not have any rain for ten years, yet the seed will germinate when the rain does eventually come. " Acheb " of all kinds is eagerly devoured by camels, and most kinds of it are very nourishing.

There is a totally different sort of flora in the Sahara above and below the 20th or 21st parallel, and the difference is rather striking to the traveller, for the change of landscape and climate to which this must be due is so gradual and so slight as to be hardly noticeable.

Much of the Saharan vegetation, although so dry and unrefreshing in appearance, contains a certain amount of liquid. It is this which enables the fauna of the desert to exist without drinking.

The question of the different herbs of the desert leads one to consider the subject of how and when camels should be allowed to graze. I found I had a lot to learn about this, and it is a most important item in the education of the desert traveller. Since one's mobility, and frequently one's life, must depend on the state of the camels in the caravan, the subject is obviously worth studying. Of course, in some cases forced marches are absolutely necessary, as when crossing a waterless tract of desert with little water on the camels. But in most cases the welfare of the camel must be studied as carefully as possible. Now, it has been noticed that the camel will eat better at certain times of the day than he will at others. Between the hours of 11 a.m. and 3 p.m. camels do not graze. They

generally lie down and rest at this time. Further, they do not graze between about 2 a.m. and sunrise. They will, practically, graze all the rest of the twenty-four hours. Experience has also shown that they graze better on moonlight nights than when it is dark. With these data as a guide, one can regulate the time of marching so as to allow the camels to graze at suitable hours. The authorities say that the animals should be allowed four hours' pasturage at the very least during the twenty-four.

Another point to be remembered is that camels ruminate, or chew their food, for some time after grazing. Time should be allowed for this. When not grazing, and particularly at night, camels can often be observed chewing. They will go on scrunching their massive jaws for hours together, while squatting on their hunkers round the camp after dark.

Camels are strange beasts, passing the comprehension of man in many ways. I often used to watch them in their pasturage, and think what antediluvian creatures they appeared to be. The camel seems to belong to a prehistoric age, and should be classed with the giraffe, elephant, and hippopotamus, to my mind. He is a sad sort of animal, seeming never to take any enjoyment in life. Even when in perfect liberty, grazing, he does not look happy. He only then seems to be a little less discontented than usual. But with all his peculiarities and vices a camel is a necessity in desert travel, and I suppose we should be grateful to him for enabling us to cross these inhospitable tracts. Without the camel the Sahara would be even less known than at present.

CHAPTER XXII

The dreaded Tanezrouft—Camel saddles—The wells of Timissao—A valuable plant—A night march—An improvised shelter—Sandstorms—Enemies to sleep—Gloomy scenery—The water supply—An exhausting struggle—The wells of Ahnet—Instinct of the guides—Protecting the water-skins.

WHILE at In Ouzel I had to make a careful overhaul of my equipment. The portion of desert now close in front of me was the much-dreaded Tanezrouft, and a journey across it at any time of the year was not a thing to be lightly undertaken, but more especially was this the case during the hottest season.

The Tanezrouft extends between the 23rd and 26th parallels in the Central Sahara, forming a tract of desert in which there is no water, to all intents and purposes no grazing and, what is still more inconvenient in many ways, not even any firewood. The consequence is that all these necessaries must be carried for a distance of about 200 miles. The width of this waterless region varies in different parts, but at the point where I was going to cross it I must expect to take about seven days to accomplish the journey. This is a tract which must be crossed as rapidly as possible in order to reach the wells on the north side, for a camel in hot weather cannot exist more than about eight days without water; moreover, the water-skins are calculated to leak to the extent of one-tenth per diem, from which it is evident that a full water-skin would have lost the whole of its contents by the tenth day, even if none of the water in it had been drunk. It follows that any delay over

and above seven days, in the passage of this dreary bit of desert, would be extremely perilous for the safety of the caravan.

From the above considerations it is obvious that it was imperative to be most careful that all details connected with the equipment and organization of the little caravan should be put into first-rate working order. It was unfortunate that I had been ill at this rather critical time, but I had in person seen to as much as possible, and had left everything else in the competent hands of Mahomed.

Broken saddles required to be repaired and thoroughly overhauled, girths had to be mended and renewed, water-skins must be carefully tested to see they did not leak more than the normal amount, while camels' wounds had to be dressed. Besides, the whole of my kit really needed overhauling, but owing to the sandstorms constantly blowing, it was impossible to do this. Our greatest difficulty was with the saddles, for many of these had the wooden framework broken, and this required to be firmly lashed in order to make the saddle serviceable.

There are two or three different patterns of pack-saddle used in this part of the Sahara. The French-made one is much solider than the native article, but in some respects is less adapted for use with camels, and likely to give them a sore back if not carefully attended to. The French saddle, called the Gao pattern, consists of a wooden triangular frame, made of two horizontal bars on each side, which are connected by two transverse pieces at the sides, the apex of the triangle being formed by a further horizontal bar. This saddle fits on to the camel's back on the top of two well-stuffed panels which are filled with cotton-wool. On the framework are fixed two iron hooks on each side, so that baggage can be slung on each side of the frame. In most cases the two panels are sewn together, a hole being cut in the middle to allow of the camel's hump

protruding. I found that the chief drawback to these saddles was that the panels were often not long enough; consequently, if a load was used which projected lower than the panel on the animal's side, he was certain to get chafed by the constant friction of the article against his skin. I saw some nasty wounds which had been thus inflicted, and these were always difficult to heal.

The native type of saddle, called the "arrej" in Arabic, is a far simpler affair, made on the same principle but with two light pieces of bamboo fitting over each side of the camel, and connected by two diagonal bamboos. This saddle also is kept from pressing on the animal's back by means of a cushion of date-palm fibre, while no girth whatever is used.

Owing to there being no girth, a very nice adjustment of loads is required to preserve the balance. I have seen some curious sights with this saddle, too, when a camel has been coming down hill. If he trots disaster is almost inevitable, for he jogs his saddle out of place, and equilibrium between the loads is lost, so that they fall to the ground, saddle and all.

Riding-saddles, called "rahla" in Arabic, are of two kinds—the Arabic and the Tuareg saddle. These simply consist of a round piece of wood for the seat, covered with leather, and a peak in front as well as one behind. In the case of the Tuareg "rahla," which is by far the most comfortable, the peaks are higher and the seat wider in circumference. The shape of the peak in the Tuareg saddle is rather strange; it is in the form of a cross. The best of riding-saddles are hard and uncomfortable if the length of march is above the average. I used to fold a blanket over mine to soften somewhat the discomfort caused by the hard wood. I never saw a saddle of European manufacture, but have no doubt that something far more comfortable could easily be made.

At In Ouzel Mahomed got rid of the useless El Bashir, and in his place an Arab friend of his, called Othman, was engaged. The change was vastly for the better, and I now found things worked much more smoothly. It appeared that Othman and Mahomed had been partners in business some time previously, so it was a great stroke of luck to find him there. It was really essential to have at least two men with the camels, for if one animal strays while grazing there is someone left to look after the remainder. As it was, my servant Musa assisted a great deal in collecting the camels from their pasturage when we were about to start on a march.

I was more than thankful to leave In Ouzel. My experiences of the place had been so disagreeable that I hated the sight of it. As soon as we once more got on the march my spirits rose again and things assumed a brighter hue.

It was the 22nd of May when we left In Ouzel. Game now was very scarce, and for about the next ten days I saw nothing more than two or three Loder's gazelle in the distance.

We had a march of about ninety miles to the wells of Timissao, which were on the southern limits of the Tanezrouft; but as we approached this dreaded region the desert became more and more forbidding in its aspect. We were now descending rapidly from the elevated plateau of Adrar to the plain of the Tanezrouft. On the east was a rocky mass of hills called the Jibal el Tirik, and at the foot of these there was a small well, but it was nearly dry when we reached it. There is hardly any grazing-land in this part, so that it never boasts of even a nomad population. It is absolutely deserted. From the Tirik hills we passed along a sandy valley between two parallel ranges of rocky hills for a distance of about forty miles. The sand here was not like that at In Ouzel, but resembled

the sand in the south of Adrar. It was as hard and as level as a running-track. Walking on it was very easy, and I used to march six or seven hours without feeling the slightest fatigue. In this valley the colouring at sunset was beautiful. As the sun went down and its crimson rays faded into a more subdued colour, the rocky hills were bathed in a lovely deep purple light, creating an effect many an artist would give a great deal to have an opportunity of depicting on canvas.

The last eight miles of the march to Timissao lay across the range of hills which had formed our right flank coming up the valley. This again was a new kind of desert scenery. Here there was not a vestige of sand to be seen. Nothing but bare rocks and huge boulders strewed the way. Marching was difficult for men and beasts, and at times there seemed every prospect of losing some of the animals down the precipitous sides of a rocky gully. Camels, unless specially trained to it, are by no means sure-footed on rough ground; frequently one would clumsily place his foot on a loose boulder and only recover himself with difficulty. After a long and excessively hot march we eventually arrived at the well of Timissao. The well lay in a sandy "oued," which suddenly emerged to view as we clambered to the top of the rocky ridge above it.

A few shrubs of "ethel" were scattered along the sides of the "oued," and as we arrived a young Loder's gazelle peered at us with inquisitive eyes, astonished at this unwonted intrusion of his desert haunts.

The well of Timissao, the last we were to see for a week, had the best water I had tasted since leaving Kidal. It was beautifully clear and fresh, so unlike the wells of Adrar in this respect. A big ledge of rock projected from the cliff hard by, under which I ensconced myself for the day. But after breakfast there was plenty to be done. We had to water all the camels, and must ensure their drinking

their fill before commencing the fatiguing march across the Tanezrouft.

In the sand was made a long, narrow drinking-trough, lined with stones, so as to facilitate the drinking operations. By this means we could water some half-dozen camels at a time.

Mahomed and Othman were stripped to the waist, busily engaged in filling up the trough, as the thirsty beasts emptied it, with buckets full of water, drawn up in the " delou " from the well. It was a curious sight to watch the animals' sides swelling to huge dimensions as they drank. I would notice a camel, apparently thin and wasting away, with his ribs all showing, come up to the trough, and after his drink he would look positively sleek and fat. When camels do drink they are greedy drinkers.

An animal consumes from eight to ten gallons at a time. But to allow him to drink all he is capable of, it is necessary to let him return two, if not three times to the trough. After drinking three or four gallons he will withdraw, and should be allowed to return in a couple of hours or so for a further ration of water, and so on till he is satisfied. For this reason it is advisable to commence the watering in the morning, in order to finish in one day. Further, camels are naturally thirstier, and drink better, when the sun is hot, than they will do at night. Watering was not thoroughly finished till 3 p.m., and Mahomed was anxious to get the caravan under way that same afternoon, so as to delay the passage of the Tanezrouft as little as possible. Accordingly the camels were loaded up with the baggage as soon as they left the water-side. A very different appearance did they present now they had satisfied their thirst to the utmost. I have no doubt they realized they were now going to be called on to undertake a tougher job than usual, and so must be well provided with their reserve of water for the occasion.

On quitting the well of Timissao we at once entered on the Tanezrouft. Quickly leaving the rocky hills behind us, we emerged on to a bleak, arid waste, consisting apparently of a vast plain of hard sand, with, on the east, a faint line of hills in the far distance. These hills marked the southern part of the Hoggar country, a land in which the nomads are Tuaregs, of whom I heard and saw more later on. Our way lay almost due north, across this seemingly endless, inhospitable plain of sand. We were now carrying water, food, and wood for the needs of the whole caravan, both for men and beasts. The wood we had collected with some difficulty on the march that morning early, and it chiefly consisted of dried-up mimosa twigs, but this was supplemented by a dried-up plant which is found in the Sahara, called " harta " in Arabic, or " aresou " in Tuareg. The latter fuel is a most useful article, being quite invaluable in many parts of the Sahara, where trees and shrubs are not found. It is a plant to which the camels are very partial when in flower, but when dried up it resembles a bunch of withered twigs.

About 7 p.m. we halted for the evening meal. There was to be little sleep for anyone the next seven days. The halt to-night only lasted till the moon rose, and then we were off once more. That night we marched from about 9 p.m. till dawn, without a halt. For the first time for months I saw a cloudy sky. The night was very dark, as the moon became obscured behind the clouds soon after she rose. It was a marvel to me how Mahomed found the way. Even had the route been a clearly defined track it would have been none too easy on such a night. But these desert guides seem to be gifted with almost supernatural powers of vision, and I never saw him hesitate once. I walked, as I found it was the only way to keep awake. When I felt a little tired I mounted my camel, but soon became drowsy and began to nod; then I felt myself

falling off the animal's back, and just woke in time to avoid a disaster. It was a long way from the camel's back to the ground. A fall would have possibly involved a broken leg, so I decided to choose the lesser of the two evils and dismount again.

I was not sorry when the day began to dawn. At any rate, it was now light and possible to see one's surroundings. We now halted for ten minutes, while the devout Mohammedans said their prayers. It was a picturesque sight to watch these men turn their faces to the pink flush in the eastern sky and kneel piously on the desert sand while they uttered the morning prayer, bowing themselves every now and again to the ground in obeisance to their God. After this short halt we marched on till the sun grew too hot, about 11 a.m. From 11 till 2 p.m. we again halted, although it can hardly be said that we rested. The heat was suffocating. There was no shade anywhere. The only possible hope of getting a little shelter from the direct rays of the sun was to rig up a *tente d'abri* of some description. I had long ago given up using my own tent for this purpose; and in the Tanezrouft, where one was fatigued after a long march under trying conditions, it was still less practicable to pitch it.

I improvised a tiny shelter with a waterproof sheet, to the ends of which were attached four strings. Making use of a couple of short bamboos, or sometimes of my rifles in the daytime, when there seemed no chance of danger, to support this sheet, I succeeded in contriving a small place in which I could sit down. The height was sufficient to permit of my keeping my sun-helmet on my head while in the sitting position, and the length was enough to allow me to stretch my legs to their full extent and yet be thoroughly protected from the sun. The four ends were tied by their strings to articles of baggage.

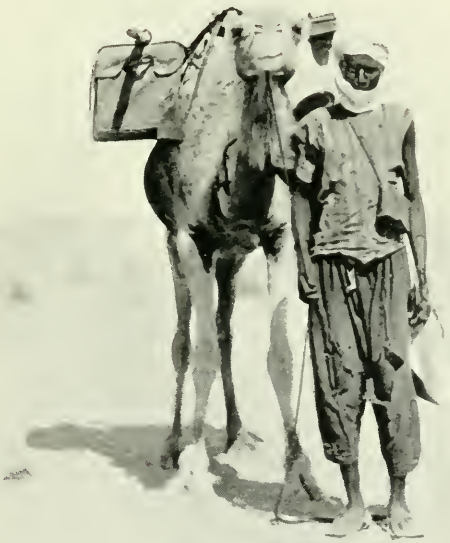
My "house" was certainly better than nothing, but

it can hardly be said that it was comfortable. My position was cramped and tiring, while the heat inside was very oppressive. A further inconvenience, and the worst of all, was that, when a sandstorm arose, I was exposed to it from two sides. It was impossible to make the covering air-tight enough to keep out the clouds of sand. I tried to close all openings with my available blankets, but the result was very poor, and in the end I had to resign myself to the inevitable and get " sanded " patiently !

The sandstorms were very frequent in the Tanezrouft, and much worse than I had hitherto experienced. The days succeeded one another without great variation in the monotony, for except for the degree of violence in the sandstorms, one day was almost exactly the counterpart of another.

These sandstorms were really the most horrible feature of that dreaded waterless desert. The storm would begin with little warning. All of a sudden in the distance there would appear a dense greyish yellow cloud, whirling rapidly towards us from the distant horizon. This was preceded by an intensely hot wind, resembling somewhat the hot-air blast from a furnace when the doors are opened. This hot wind carried with it countless scattered particles of sand, the scouts, as it were, of the storm which was following, and sent on to find out what human beings or animals were there to become the object of its attack. This preliminary wind, with its accompanying sand, was a mere bagatelle. The real trial was to follow. Close on its heels came the sandstorm—a whirling, densely packed bank of sand, hurrying forward at a headlong pace, blinding and overpowering everything with which it came in contact.

Before one of these terrible storms it is impossible to stand up without the danger of being overcome. The only plan is to fall on the ground and cover up your face,



My Servant Musa in the Sahara

This faithful Hausa servant accompanied me uncomplainingly through the hardships of nearly two months' desert travel. It will be noticed that his garments are rather the worse for wear, and, indeed, he was in a far more deplorable condition in this respect by the time we reached Insalah. He, like myself, was obliged to adopt the "litham," to prevent the blinding and choking effects of the sand.

lying there until the storm is past. The camels instinctively do the same. They know, even quicker than a man, when a sandstorm is coming, and prostrate themselves before it arrives. These sandstorms are awful things, to which even the most experienced and philosophical of Arabs never get used. Instead of cooling the air, they seem to make it hotter. The heat when a sandstorm is about is remarkably oppressive. Just before and after a storm of this description the sun is seen through a haze, reminding the spectator of the appearance it has in London on a foggy day. Of course, while the storm is raging no sun is to be seen. Indeed, the air is so thick with sand that it is impossible to see more than a few yards. Moreover, the person who raises his head when a really bad storm is raging is foolhardy in the extreme.

Besides making one's eyes very sore and mouth very parched in spite of every precaution, I found that it made my nose bleed, so great was the irritation caused by the gritty particles of sand. It was rare to have a sandstorm at night. I recollect only one case, and in that instance it was not very severe. These storms usually sprang up about 9 a.m., and raged discontinuously until 5 or 6 p.m.

It was bad enough for me, but in many ways I pitied the unfortunate Musa most. He, after a long, weary night march, was perhaps trying to cook my simple repast at midday, when a sandstorm would come up with its usual impetuosity and bury everything in oceans of sand. I must have eaten gallons of sand on this portion of my trek. I often marvelled that it did not make me ill, but I never noticed any unpleasant effects except for the disagreeable taste at the time.

During these fatiguing days I found it impossible to sleep at the midday halt, tired though I was. The discomfort of the interior of my shelter, even when it was not enveloped in a sand-cloud, was so great that sleep was out

of the question. I always longed to start on our weary way once more. But the camels had to rest, and the Arabs and Musa appeared to find no difficulty in slumbering, for which I heartily envied them. The only time I managed to sleep was during the short rest in the evening after dinner. The hour of our departure at night varied with the time of moonrise, but the evening rest rarely exceeded two to three hours. Altogether we used to march about eighteen hours out of the twenty-four.

Even when sleeping in the Sahara it behoves the traveller to have one eye open, for there is always the fear of possible attack from desert robbers. I used to be very particular at night to secure the safety of the camp as far as I could. On arriving at the halting-place the camels were formed in a small circle, each one depositing its load at the spot where it had halted. A miniature zariba of baggage was thus formed. At the rear end of this I would have my bed pitched, and never went to sleep without having my two rifles loaded by my side. Danger in the desert generally coming from the rear, I was in a position to meet it at once, for I am a light sleeper. I could not depend on the Arabs or my servant to keep watch in turns, as I had previously intended them to do. In any case in the Tanezrouft the men were generally so weary that it was almost impossible not to drop asleep.

On the 29th of May, the fourth day of our journey through the Tanezrouft, the monotonous stretch of sandy plain which we had seen without interruption since leaving Timissao, gave way to a different nature of scenery. The country now became rocky and hilly. Barren, rugged peaks of isolated hills appeared. These rocks were of granite, split and cracked into hundreds of clefts by the action of the powerful sun. Although the sandy plains we had been crossing until now were dreary, desolate expanses, yet, in some ways, the gaunt, gloomy rocks before

us were suggestive of a terrible loneliness too. On those gloomy but scorching hill-sides there existed no living thing. That parched-up land of desolation was the home of eternal death. The tops of the rugged peaks rose some three or four hundred feet above the surrounding plain, and I dare say, if some enterprising person cared to climb to the top, he would have a view over the whole Tanezrouft from one side to another, for the atmosphere is extraordinarily clear when no sandstorm is blowing.

This rocky spot in the centre almost of the Tanezrouft is known as In Zize. We were to camp on the other side of these hills at noon that day, and as we marched we saw some human skulls and the skeletons of three or four camels. The ghastly remains of some lost caravan. The bones, and in some cases the skins, were perfectly preserved. Here there were no vultures or wild animals to feast on the bodies, nor was there any damp to rot the skin. It was not difficult to surmise how this caravan came to perish. In the desert it is nearly always the same story. Either through losing their way, or an accident to the water supply, a caravan struggles on until it is exhausted and dies of thirst.

After quitting this place of rocks the desert resumed its former appearance. The interminable stretches of hard sand seemed to extend into infinity. As a rule it was flat as a billiard table, but here and there could be seen a small sandy mound or undulation which probably served as a landmark to the guide. Our daily marches averaged forty-eight kilometres, about thirty miles. As the camel is a slow marcher when laden, and sandstorms greatly interrupted progress, the distance covered was considerable. Besides, the animals were now weary and had some difficulty in maintaining even their usual pace. I was obliged to discard some of my baggage, chiefly ammunition, heads, and "couscous," in order to lighten the loads.

The water supply was lightening itself with alarming rapidity, and required a watchful eye. Musa was the chief, and indeed the only, offender. The negro is used to drinking a great deal of water, being ignorant of the virtue of self-control in this matter. I several times caught him taking surreptitious draughts at the water-skins, and had to check him severely. The heat, and thirst engendered by it, were certainly intense, so that I could not help secretly sympathizing with him, although it was necessary to be harsh. The daily ration of water was doled out twice a day—at the midday halt, and again in the evening—and at no other time was anyone allowed to touch the water supply.

Each day passed in the same fatiguing, wearisome manner. Long, exhausting night marches, a halt in the midst of heat and discomfort, followed by further marching in the afternoon, until, by the evening halt we were dead beat. And all the time, at short intervals, we had those horrible sandstorms. At night, while marching, it is true, we were exempt from the trials of a sandstorm, but by that time we were so tired that we marched sullenly on more like machines than men. The trials of those days in the Tanezrouft are not easily to be forgotten. Sometimes I used to wonder if there would be any end to it. The place in my imagination conjured up ideas of what the infernal regions must be like. A continual struggling forward with endless difficulties to contend against. To all intents and purposes no rest, a thirst that could never be quenched, and an utter distaste for the monotonous diet of dates and " couscous " well mixed with sand !

I often now wonder how one got through those weary days. When we halted in the daytime, as I could not sleep I used to attempt to write and work up my notes, but the discomfort was so great that the work I got through did not amount to much. Towards the end the

My Arab Guide, Mahomed-Ben-Kaid-Kaddour

This man, to whose skill and endurance I am indebted for safely crossing some eight hundred miles of the Sahara wastes, was a typical, hardy desert wanderer. With a cupful of water and a handful of dates as his daily ration he would bear the scorching heat and suffocating sandstorms without showing any signs of fatigue.

water we had to drink was so disgusting, owing to the time it had lain in the water-skin, that the only way I could drink mine was in the form of tea. Fortunately I was well provided with tea all through my Sahara trek, and I used my ration of fuel in order to boil water for tea.

On the sixth day we crossed a series of parallel ridges of sand-hills. The sand here was, of course, quite soft, and the camels' feet used to sink several inches deep into it. These sand-hills appeared to stretch as far as the eye could reach to the west, and possibly have some connection with the hills of moving sand known as Amool Gragim, which lie to the north of the desert salt-mines of Taudeny.

On the evening of the 1st of June, just before sunset, we arrived at the wells of Ahnet, having, to everyone's joy, at last emerged from the desolate wastes of the Tanezrouft. Here there was fair pasturage for the camels, and everyone was in need of a rest, so I halted for a day and a half.

Some of our animals were in a bad condition. The march had been more than usually trying owing to the heat, and to the fact that caravans so rarely travel at this time of year in consequence. A feeling of satisfaction came over me at the thought that the worst was now over, for the strain of the last few days had been almost intolerable.

One of the most marvellous things about desert travel in the Sahara is the extraordinary instinct for finding the way possessed by the guides, and already referred to.

For miles and miles on the Tanezrouft there was, as far as I could see, no landmark of any description to assist Mahomed, yet he never erred. On this vast plain it would be extremely easy to miss a well, for an error of a few minutes in direction, when prolonged over a distance of about 133 miles, would bring the caravan to a point many miles away from the well on one flank or the other.

For this very reason a compass is not of much use in desert travelling. The guide's knowledge and instinct must alone be relied upon. Of course, the sun and stars give a good guide a very fair indication of his direction, but as I have just hinted, a greater degree of accuracy than this is imperative, for, surrounding a well, for many miles there are probably no landmarks to help the guide, and the well itself can usually not be seen till it is actually reached.

Towards the end of the Tanezrouft Mahomed's sight began to get weak. He had probably strained his eyes by continually gazing at the far-distant horizon. I gave him some lotion from my small stock of medicines which did him good in a few days.

In the desert one of the commonest diseases, if not the only one observed in this healthy region, is ophthalmia. It is said to be produced by the sand which is always in motion in the atmosphere. Grown-up people and children alike suffer from it.

Our chief source of anxiety was always the water. The skins, or "guerbas," in which this is carried are extremely susceptible to injury. Thorns, which are so common in the Sahara, penetrate the soft goatskin with ease, causing a puncture which very soon empties the bag of its precious liquid. For this reason great precautions are necessary, when a halt is made, that the water-skins shall not be placed on the bare ground on being taken off the camel's back. It is essential to place something firm underneath. Further, the "guerba" should be covered over in the daytime to prevent it from perspiring unduly on account of the heat. In the desert one gets to care for one's water supply with extraordinary solicitude. But this is hardly to be wondered at, since it is the very soul of existence there.

These water-skins each carry about six gallons when

full. They resemble the "mussock" of the Indian "bhisti," and have one end left unsewn to act as a mouth-piece. This end is tied up with string on the march. The "guerba" is slung, by means of a rope attached to two of its corners, across the hooks on the pack-saddle. At first I used to carry a water-bottle on my own camel, but latterly I rejected this in favour of a small "guerba," which carried about a gallon of water and kept it far cooler. I never used a filter, and sometimes was obliged to drink the most filthy water, which under ordinary circumstances one would not have washed in. I must say that I seldom felt any ill-effects for long, after drinking this unwholesome stuff, and can only attribute it to the fact that one keeps in marvellously good health in that dry atmosphere.

CHAPTER XXIII

The Ahnet or Western Hoggar—A bad reputation—Tuareg highwaymen—A salt well—A barren region—We reach Insalah—A dramatic entrance—Colonel Laperine—Insalah—Its importance—Resources—Artesian wells—Varieties of dates—Pasturage—The streets.

THE region of the Tanezrouft, which we had just quitted, divides Adrar from the Hoggar country, and it was into the Ahnet, or Western Hoggar, that we had now emerged. The subsoil of Hoggar Ahnet consists of a certain amount of clay underneath the sand. In this respect it differed from the Tanezrouft, which has a large proportion of salt in its subsoil. The salt is, of course, to a great extent responsible for the barrenness of the Tanezrouft.

Western Hoggar consists of a plateau, about 200 feet lower than the Tanezrouft, the average height of which is 1200 feet. The whole of Hoggar is a mountainous country, situated almost in the middle of the Central Sahara. The nomads, as has already been stated, are a tribe of the Tuareg race. Their country is poor, as is only to be expected in the Sahara, but at the same time a little barley is grown in certain parts, while a small grape is also known to exist. These Tuaregs have a certain number of sheep and goats, but they are far inferior in quality as well as numbers to the flocks of the Iforas. Indeed, the Hoggars buy goats and sheep from the nomads of Adrar.

The Hoggars had a most unenviable reputation as the greatest robbers in the Sahara until quite recent years. The French desert columns have, however, inflicted some

severe lessons on them, and they are now no longer so much to be feared as formerly. That they have not altogether abandoned their marauding propensities, however, I was soon to discover for myself.

The Hoggar country is well placed for its nomads to practise their robberies. This land lies on the flank of the trade routes of caravans proceeding from the north to the Niger, or to Domaggoran and the Hausa States. Hence the Hoggars were greatly feared by these caravans for many years. If a caravan was not well protected it was sure to fall a prey to their plundering bands, while isolated parties of two or three men and a few camels ran considerable risk of being captured and killed by them. These Tuaregs, like nearly all their race, are not traders. They have none but the most meagre resources in their own country, therefore they had to plunder to live. In the desert they have few superiors, and are adepts at handling camels. In some parts of their country water is comparatively plentiful, while owing to the height of the mountains the cold in the night and early morning from October to January is very great. The highest peak, Mount Illimane, rises to a height of 9000 feet, and I have been told that Tuaregs state that snow has been seen on it. Hoggar Ahnet is in the nature of a flat spur projecting from this otherwise mountainous country.

At 2.30 p.m. on the 3rd of June we left the wells of Ahnet. This was now the last stage of the march to Insalah, and as time was getting short I was anxious to push on as rapidly as possible. I calculated I had still 800 miles of desert to traverse before reaching the Algerian railways, and as my leave expired on the 10th of July I should have some difficulty in reaching England by that date.

Compared with the Tanezrouft this land appeared to be a smiling garden, so sharp was the contrast! Here there

were wide "oueds," with good grazing for camels, and the relief at seeing even that dried-up Saharan vegetation was indescribable. Wells were by no means numerous, however, and between Ahnet and the next well, called El Jibal, there was a stretch of eighty-eight miles, or three long days' march. It was while traversing this piece of desert that we had an encounter with some Tuareg highwaymen.

One afternoon, about three o'clock, I noticed three wild figures riding rapidly towards us on camels. They were approaching from the south-east, so presumably came from the interior of the Hoggar country. I called Mahomed's attention to them, and instinctively felt for my rifle, which I always carried slung at my saddle. The small rifle was similarly slung on the saddle of my servant, and both were always ready for use.

Mahomed was armed with an old French Lebel rifle and was, I knew, a good shot. Othman had only a flint-lock muzzle-loader, which was of doubtful value even if he were an expert marksman. In the Sahara no one travels unarmed, so we were not surprised to see the new arrivals had weapons. But they were literally armed to the teeth, so appearances rather suggested they were up to no good. Each man had an almost new Lebel carbine, with a bandolier full of ammunition slung beside it, in addition they carried the two Tuareg swords and a spear each.

Mahomed said nothing in reply to my ejaculation, but I saw him slip a cartridge into the breech of his rifle, which significantly showed what he thought of them. I gave Musa a warning word to be on the alert with the ·303, and by this time they were almost within speaking distance.

Their appearance was fantastic, reminding one forcibly of the brigand in a play. The leader, a stalwart man with his face more than usually enveloped in his "litham," wore a bright red cloth thrown over his shoulders, while his

ARAB AND TUAREG

Typical nomads of the Sahara. Observe how their faces are covered with a veil ("litham") to keep out the desert sand.

legs were encased in a pair of gaily decorated leather boots, which reached almost to the thigh, and covered entirely the lower part of his baggy white trousers. The two followers were similarly attired, but less elaborately, and appeared considerably inferior in rank. All three were mounted on the shaggy-haired camels which are bred in the mountainous country of Hoggar. These beasts looked built for speed, and appeared to be in first-rate condition. Until I was more certain of their motives I did not produce my rifle, although I was ready to do so at an instant.

At the time I was in rear of the little convoy, and the leader, closely followed by his companions, rode rapidly up to Othman, who was in front with Mahomed. Two men roughly seized Othman's "mesoued" (leather kit-bag), while the third got in front of him, laying his hand on his rifle. Their movements, evidently carefully prearranged, had been so rapid that all this had happened in a few seconds. I at once produced my rifle, urged my camel forward, and ordered them to desist. My knowledge of Temacheq, as the Tuareg language is called, was limited to a few words, but, on hearing my tone of voice, they immediately looked towards me, and I covered the third member of the gang with my rifle. He let go his weapon at once, and the other two desisted. By this time Musa and Mahomed had also got their rifles raised, and they realized, I suppose, that the game was up. I can only imagine that they took it for granted that we would be cowed at their overbearing demeanour, otherwise their action in plain daylight would appear very foolish.

I told Mahomed to tell them to clear off at once or I should make them prisoners; at the same time we relieved them of their ammunition, without which they were harmless. I could not carry their rifles, so left them in possession of these. Moreover, rifles are fairly easy to replace, as there is so much gun-running in North Africa, but am-

munition is very hard to obtain. So ended this little incident, which was my only experience with desert robbers. It was perhaps fortunate that this party was such a small one, but, in any case, we were well armed, and could always have given a good account of ourselves.

After descending from the plateau of Ahnet we approached the desolate region called Mouyidir, which lies between Ahnet and the Tidikelt country. It first appeared as a frowning mass of black, rocky hills on the east, which got nearer to us as we advanced each day. Finally, we were marching on the western border of the Mouyidir country. At this point was a well, called Imbelram, which we reached on the 8th of June. This well was so salt that the water was almost undrinkable. My first draught of water made me ill, and it had an unpleasant effect on all who drank it. However, we had to fill up our "guerbas" with this water, for there was ahead of us a waterless region, about eighty miles wide, which was a part of the Mouyidir plateau.

In some respects this region was as inhospitable as the Tanezrouft, but a scanty amount of pasturage and fuel existed for the first fifty miles, the remainder of the desert being absolutely without any vegetation whatever.

Mouyidir is a district in which rain seldom falls. For the past seven years there had not been a drop, so it was hardly to be wondered at that there was little vegetation in the land. The plateau is of chalky soil, the northern part being cut up with numerous slaty gullies. Although sandstorms were less frequent here I found the heat more trying than in the Tanezrouft. The highest shade temperature I recorded was 111·5 degrees, and possibly we were fatigued by our previous experiences, so noticed the heat more than we should otherwise have done.

Musa was quite overcome on two occasions, and I began to feel glad we were so near Insalah, where he would be

able to rest. Poor Musa by this time had assumed a woeful appearance. His clothes were in such rags that he had to discard his nether garments altogether, and turn his coat into trousers, by using the sleeves for his legs! Around his body he carelessly flung his blanket, thus creating such a ludicrous object that I could not help laughing when he first showed himself in his new attire. My own scanty wardrobe was sadly in need of repair, so I also longed for a chance of mending my clothes.

At this time I had, fortunately, one water-skin of fairly good water remaining from the previous well, so decided to use it, only, for the passage of the Mouyidir desert as long as it would last. The salt water of Imbelram not only made me ill, but seemed to increase, instead of alleviating, the thirst. Here again hard marching was the order of the day. The distance to the well of El Gouirat on the north side was covered in fifty-four hours; and the last fifty-five miles took no more than thirty-four hours, in which we only rested for four hours altogether. I must own to being greatly fatigued on arriving at the well of El Gouirat, but as Mahomed declared it was "quite near" to Insalah, indicating that we could reach it in three hours, I decided to go on with him that afternoon, leaving the baggage to follow with Othman and Musa the next day.

I suppose Mahomed's joy at being so near his destination made him exaggerate, for, to my cost, I discovered it was about twenty miles to the oasis, and we did not arrive till eight o'clock that night. Our camels were weary, and we were not a whit less so when, at last, we saw the palm trees of the oasis in the distance.

As we rode over the crest of a sandy ridge Mahomed pointed in front of us to a faint, dark line, just visible in the rapidly falling dusk. The houses I could not see; even in the daytime they are difficult to distinguish from the surrounding sand until one is quite close to them.

My entry at the officers' mess was a strange one. The Arab servant who answered my summons at the door regarded me with evident suspicion. Probably the only Europeans he ever saw were the officers with whom he was well acquainted, and the sight of a strange white face seemed to cause him great uneasiness. He positively refused me admission, so I brushed past him and mounted some steps towards the flat roof on which I could see some men sitting. When I announced myself their surprise was hardly less than that of the servant. They afterwards told me that they had heard news of my projected journey during the previous October, nine months ago. They had expected me to pass through Insalah in March or April, and, as I had not arrived, they thought I had probably abandoned my plan or come to grief in the Sahara. No wonder, therefore, that my appearance now caused them some surprise.

When I arrived that night, the 12th of July, the heartiness of their welcome could not have been exceeded. It made one really appreciate kindness when it was extended, as it was by these French officers to me, with such thorough genuineness.

At the risk of being accused of gluttony, I must acknowledge how I enjoyed my supper at Insalah that night. After eating food cooked in sand for the past five weeks it was a treat to have a well-served-up dish.

It appeared that the Commandant, Colonel Laperine, was away, a piece of news at which I was much disappointed, for I had heard so much of his fame as a soldier skilled in desert warfare, that I had looked forward to this opportunity of meeting him. In the Central Sahara, I suppose there is no name so widely known and respected, or feared, as the case may be, by Tuareg and Arab. He had served for many years with French troops in this region, where only the hardest and most self-controlled

INSALAH OASIS

Date-palms grow here in profusion, thanks to the liberal system of irrigation which waters their roots. In the moist ground at their feet are grown small patches of barley and a few coarse vegetables. On seeing this vista of emerald verdure, who would think that for many hundred miles south, east, and west there is scarcely a green blade, nor anything more restful to the traveller's jaded eye than small patches of sun-scorched Saharan vegetation?

men can possibly exist, and on many occasions had led "forlorn hopes" with brilliant success. Although he has now left those parts for a high command in France, Colonel Laperine's name is one which will live for many a long year in the Central Sahara.

I was comfortably housed in the post at Insalah that night, and the following day my baggage arrived at an early hour, having marched all night. The exhausted camels were taken away by Mahomed for a well-earned feed on dates and a thorough rest. Although we had been fortunate in not losing a single animal during the hardships of the last five weeks, yet most of them were in a desperately poor condition, and would need many weeks in a pasturage before they would be again fit for work.

From Gao to Insalah I calculated I had marched across 936 miles of desert, and the time taken was fifty days.

I had slept that night on the roof of my house, as I was warned it would be very hot inside. I awoke very early to find a small sandstorm raging round me, and jumped out of bed fairly quickly. It was not till some hours later, when the wind had abated, that I was able to get my first real glimpse of Insalah.

The officers' quarters were all inside the fortified post, and were built with thick walls of red clay. This clay is found in the desert in certain places not far from Insalah, at some feet below the sand, and all the huts at Insalah are made of it. Insalah lies in the middle of a sandy plain, which is enclosed on the east and west by low ridges of sand-hills. It is one of the oases, and the principal one, in the region called Tidikelt. It is a date-palm oasis of some importance. The oasis stretches for a distance of about three and one-third miles to the west, while the grove of palm trees is on the average one and one-third miles wide. Insalah is made up of three "ksours" or villages. The

total population is about five hundred. These consist mostly of Arabs, but traders from all parts of the Sahara, who are constantly arriving on their way through, make a further floating population of fifty to one hundred souls.

The importance of Insalah is due to its geographical position. It lies at the eastern extremity of the long line of oases which commences with Colomb Béchar, extending through Beni Abbes and the Touat. Owing to this comparatively fertile region of oases giving a good line of communication into the Sahara from the west, caravans from the borders of south-west Morocco naturally follow this route and come to Insalah. From Insalah there are several important caravan routes leading north, south, and east. The main caravan route from the north, leading from Biskra to the Niger, passes through here; while caravans proceeding to Tripoli from the west also use this route in preference to any other.

Water at Insalah is very plentiful, but slightly salt. It is found at a depth of about fifteen feet, but the second layer of water, which is preferable for Europeans to drink, is found at a depth of thirty feet.

The principal resource of Insalah is its dates. The population lives on the date harvest, and there is a sufficient surplus for sale to nomads in less favoured localities in the desert. A small quantity of corn and barley is also grown by irrigation. The method of irrigating is worthy of notice. Water is, of course, led from the wells, of which there are positively hundreds at Insalah. Small trenches are dug, called "fogara," by which the water is conducted from the well to the foot of the palm trees, thus irrigating the dates. Around the foot of the palms each landowner grows a small farm of corn or barley. These little farms are irrigated from the main "fogara," by minor channels leading in different directions.

During the past three years the French have bored

THE ARTESIAN WELL OF EL BARHA AT INSALAH

By boring artesian wells the French have done much to fertilize the Insalah oasis. The first layer of water at Insalah is close to the surface, but is exceedingly saline, which is seen by the curious crust of salt deposited on the surface of the sand in the vicinity of a well. The water at this artesian well rushes out with great force, being led off in various directions by small channels to irrigate the surrounding land.

THE MARKET-PLACE, TOUGGOURT

Groups of Arabs are to be seen, squatting in Eastern fashion, selling their wares at these stalls in the daytime. The market is also a great place for gossip, where the news of the desert is dispensed—often highly coloured—to all comers. One of the chief features here is the tea tavern, much frequented by these people, who, being Mussulmans, are forbidden, by the tenets of the Koran, to drink alcohol.

numerous artesian wells. The largest gives an output of 4500 litres a minute. The result of all this irrigation is to produce a wonderfully verdant mass of foliage, which is most refreshing to the eye of the desert traveller, who, like myself, has not seen anything that could be called really green for many weeks. It cannot be said that Insalah is a prosperous centre of trade. Beyond a little commerce in dates it does no business whatever. The inhabitants are poor. The place is being rapidly encroached on by the desert sand, and, altogether, its future does not appear bright. In order to prevent the sand from encroaching desperate efforts have been made to keep it out by building barricades on the side from which the prevailing wind blows. These barricades, built on the north-east of the oasis, are made of batches of palm leaves, placed on the tops of high mounds or sand-dunes. But Insalah is a place of sand, in which, during the greater part of the year, a strong north-east wind is blowing, ever bringing more and more sand into the oasis. The so-called streets are several inches deep in soft sand, and everything gets covered with it in the houses.

While at Insalah I went for a ride in the palm groves, and it was then that I learned something about dates. There are many varieties of the fruit, but the principal ones are the "grhess" and the "deglet-nour." The former is the ordinary date of commerce, and is the one grown and sold at Insalah. It is the "grhess" which is eaten by the desert traveller, and it is carried for sale in bags made of camel's hair, called "tellis." A "tellis" contains eighty to one hundred kilos of dates, and two "tellis" make a camel's load. Dates are harvested in September or October. At this period of the year nomads flock to the oasis to gather their harvest or buy the fruit if they do not themselves possess trees at Insalah.

The "deglet-nour" is a finer date. It is, indeed,

the date we see in England, sold for dessert in white boxes. None of these are grown at Insalah, but they come from the oases in the extreme north.

If rain falls in any quantity where dates are growing the fruit is ruined. The date tree requires plenty of irrigation at the roots, but water on the fruit quite spoils the latter. The reason for this is that dates are covered with a coating of sugar, which protects and nourishes the fruit, but rain washes this off. At Insalah, and all date oases, there are swarms of flies. These flies come to feed on the sugar, just mentioned, on the coating of a date. The plague of flies in these places is most disagreeable, and commences from the time the fruit begins to ripen, continuing till the end of the harvest.

Pasturage for camels is bad and scarce near Insalah. Camels have to be sent 200 kilometres away to graze, so that, when they are at Insalah, some other form of food has to be given them. The animals actually stopping in the oasis are generally fed on dates. These are broken up into small pieces, and either given raw, or cooked soft, to the beasts. Dates are an expensive form of diet for the camel, as his appetite is so insatiable, but at the same time they are very nourishing. Camels are also fed on barley, but as the quantity grown at Insalah is so small this form of food is exceptional.

Some of the streets of Insalah are absurdly narrow. The main street in the principal "ksour" in one place is barely twelve inches wide. The ponies of the oasis are very clever at passing along it—from constant practice, I suppose. The houses at this spot have been built so close together that little room was left between them for a street. Insalah has the appearance of an Eastern town. Arab beggars and cripples are a common sight in its streets. Some of these are uncommonly dirty, but picturesque. Tattered, flowing gowns, once white, but now coffee colour

from the dirt of ages, adorn their lean bodies; while the older ones have fine white beards, often sweeping half-way down their breast. The Arabs of this part are fine-looking men as a rule. They are very pale of complexion, with black or dark brown eyes, aquiline noses, and white teeth. Most of them are muscular and extremely wiry. I fancy a great many children die at birth, so it is a case of the survival of the fittest.

A strange place is this little town of sand, buried in the heart of the Central Sahara, but although so small, and with such limited resources, what a paradise it seems to many a wayfarer in the desert! Here at least it is possible to get shelter from the cruel sandstorms and from the fierce heat of the sun. At Insalah there is that precious necessity of life, water. While here, also, a man can rest, and his camels can be relieved of their burdens. The necessity for hurrying forward with the restless energy which is required of a caravan in the Sahara need no longer be exercised. Peace and rest are the two exclamations which must rise to the lips of almost every traveller when he sees the Oasis of Insalah before him.

CHAPTER XXIV

Disturbing news—*En route* for Algiers—A remarkable man—Horses at Insalah—Hospitality of French officers—Slavery amongst the Arabs—An unusual sight—A pathetic story—My own valet and cook—A precipitous track—The "Great Erg"—Hassy Inifel—An incompetent guide—Lost—A useful camel-driver—A hospitable Arab chief—An unappetizing menu—The dates of Ouargla—Touggourt—A ramshackle coach—Biskra.

THE morning after my arrival at Insalah the officer in command of the post came to see me wearing a very troubled look. I could not help surmising that some serious incident had occurred, and waited for him to tell me what it was.

It appeared that a messenger had just arrived in great haste on a camel from a place called Tit, which was a small oasis in the Touat region, about sixty-six miles from Insalah.

The messenger, a "Méhariste" of the camel corps, stationed in the Tidikelt, was one of a column which had gone out with Captain Niéger, some days previous to my arrival, into the desert west of Insalah. This column was engaged in some military operations in that district which were expected to last some time. The news which he brought was grave. It appeared that Captain Niéger had stopped at Tit to settle some dispute between two Arabs there. One of these men, apparently dissatisfied with the decision of the Captain in the matter, had waited his opportunity for revenge.

When Captain Niéger was entering his tent and had his

back turned to the man, the latter sprang upon him and stabbed him in the liver. He then lifted his dagger for a second blow, but Captain Niéger had quickly turned and caught his hand as it was descending. The second stab was of no consequence, merely cutting his wrist, but the first one had caused a dangerous wound. The Captain lay in a serious condition at Tit. The message urgently asked for a doctor to be despatched at once. It was further stated in the message that the would-be murderer was a fanatical Mohammedan, but that he had been caught, and it was hoped the trouble would not influence other fanatics in the district to a serious rising. My host was naturally very disturbed at this news, especially as the Captain was a great personal friend of his. A doctor was immediately despatched to the scene of the incident, and we could only hope that he would be in time to save the officer's life. It was evident that his condition was critical, for the Captain had sent a message for his family in France.

I had now to arrange for fresh camels and a new guide to accompany me from Insalah to the end of my journey. My original plan had been to go from Insalah to Colomb Béchar. The latter oasis lies about 600 miles north-west of Insalah. It is at the rail-head of the Oran railway. I now found, however, that I should not have time to carry out this part of my programme, and that I should be obliged to adopt the shorter route to Algiers, which led almost due north through the oases of Ouargla and Touggourt. By this latter route I should be able to join the railway line at Biskra, 125 miles north of Touggourt. Moreover, between Touggourt and Biskra I could have the benefit of the coaching service, which runs three times a week and covers the distance in two days.

An Arab trader was found willing to let me have camels and to act himself as guide. My caravan was to be

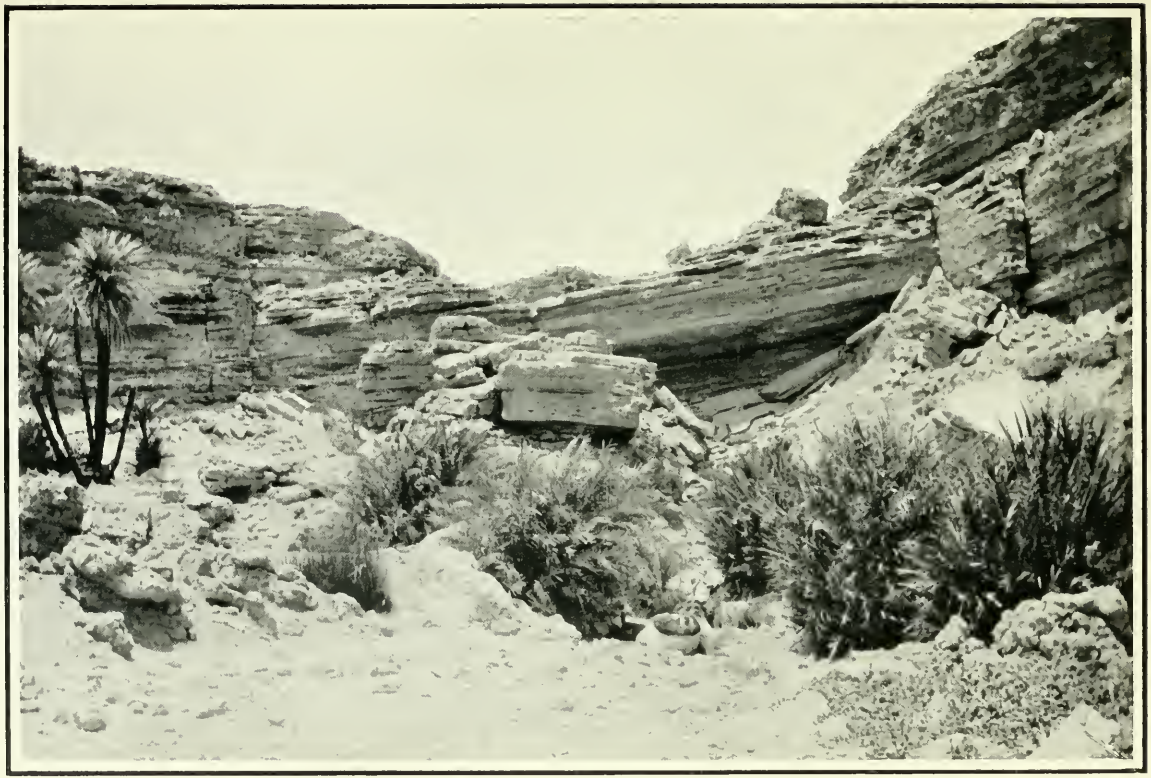
ready on the 15th. I had now consumed, or thrown away, so much of my ammunition and provisions that I could with ease reduce the number of baggage animals to two.

A French sergeant, who was proceeding on leave, was to accompany my caravan. He also had two camel loads. Our two "méhara," or riding camels, made the total of the caravan amount to six camels. The guide had one "sokrar," or camel driver, to assist him, and included in the party was an Arab soldier going on furlough to the north.

Our guide was not a prepossessing individual. He belonged to a mongrel race who were an offshoot from the big Chaamba tribe. His appearance led one to believe that he was a lazy and not over-intelligent scoundrel. However, guides do not grow on every gooseberry bush at Insalah, so I considered myself lucky to be able to secure one so quickly.

A question that rather puzzled me was how the news of my intended arrival had not reached Insalah by the messenger who had been despatched from Kidal. I was informed, however, that he had not yet arrived, and, curiously enough, he did not arrive till the day before I left Insalah. So I had actually travelled more rapidly than he had done! He had been much delayed by some accident to his camel and by the great heat on the way.

The camels I was to use were far stronger-looking animals than any I had seen in the south. On the other hand, the riding camels of the north are inferior to those of the Iforas. The baggage camels will here carry enormous loads. It is quite a common sight to see 400 to 500 pounds on an animal's back, while they even carry as much as 600 pounds in some parts. Camels will travel without a halt for a fortnight with such a load on their backs with-



THE SPRING OF EL GUETTERA

This is an unusually attractive-looking spot for the Sahara Desert! It was the only occasion on which I saw water flowing out of a spring between Gao and Biskra—1600 miles. A spring of cool, crystal water flows out of the rock here—a grateful boon to the thirsty traveller who, like myself has been existing on disgusting liquid, made nauseous by several days' jolting in a not over-clean water-skin.

out suffering any ill-effects. But, at the same time, it must not be thought that these animals will be fit for hard work at once directly they reach their journey's end. Like other camels in the Southern Sahara, they require long periods of rest after accomplishing a long desert march. Two to three months in perfect liberty in their pasturage is necessary for a camel in such a case.

At Insalah there is a fine library well equipped with books on desert travel. I had little time to do more than glance at one or two of these, but any desert traveller could not fail to be interested in much of this literature. One book particularly roused my interest. This was a work of Saharan travel by a man called "Père de Foucauld" (the Vicomte de Foucauld), whose name is well known to men in Central Sahara.

This remarkable man was originally in the French army, but latterly joined the sect of the "White Fathers." He has travelled much in the desert, and a great many years ago executed a wonderful journey from the Mediterranean through Morocco to the Atlantic coast in the Spanish colony of Rio del Oro. This journey he performed in disguise as an Arab, but was discovered by the natives to be a Christian and a European, and only escaped with his life after running some extraordinary risks. M. de Foucauld has for the past few years taken a great interest in the Tuaregs of the Hoggar country. He resides among them, treating sick people and doing much good in several ways. He has so far gained their confidence as to be able to remain unmolested in their wild land. Further, he has greatly assisted the French Government in stopping the plundering habits of the Hoggars. He resides in a little hut in a part of their desert called Tamanrasset, a good many miles to the east of the route I had taken, and is almost the only European with any knowledge of the

language of the Tuaregs. He is now engaged in writing a dictionary which will be of the greatest assistance in the study of Temacheq.

The horses in use at Insalah come from the north. They are bred in that part of Algeria called the Tell, which is a region along the coast of the Mediterranean. These horses seem to keep very fit at Insalah. They are sturdy little animals, about 13.2 to 14 hands, rather resembling the Barb, but more stoutly built. All the Europeans at Insalah keep horses. Of course, these animals are of no use in the desert, but to ride about in the oasis they are most useful. The chief difficulty is getting them across the Northern Sahara to Insalah. They are fed on barley or crushed dates. No sheep or cows were to be seen, but I was told that in the cooler season, from October to January, when the caravans are trading with the Adrar of the Iforas, a considerable number of sheep are brought here for sale. My guide Mahomed told me that the previous year he had brought a flock of sheep from Kidal, which had cost on the average 5 francs a head, and he had sold them at 15 to 25 francs apiece at Insalah. The profit was good, but obviously the risk was great, even when wells were more numerous and better supplied with water than at the present season of the year. Moreover, there was always the dangerous passage of the Tanezrouft to cope with, and for that portion of the journey water had to be carried for the sheep as well as the men of the caravan, thus entailing a huge number of camels for water alone.

The last morning of my stay at Insalah I was the guest of the officers at *déjeuner*. I was much honoured at being the recipient of many kindly expressed wishes from the good friends I had made there, and, as they stated, it was rather a unique occasion for an English officer to be entertained in the Sahara by officers of the

French army. Many and fervid were the words in which the Commandant hoped for the continuance of the *entente cordiale*, and I could only reply that, judging from my experiences while travelling through the vast country which was ruled under the French flag, there seemed little likelihood of the good feeling between the two countries not enduring for many years to come.

My servant Musa had not yet recovered from the effects of our trials in the Tanezrouft, and I had some doubt as to the advisability of taking him any further. Unfortunately, there was not the slightest prospect of getting a servant of any description at Insalah. While I was debating this point, however, he hinted at being frightened of going into Algeria on account of his dread of being captured into slavery by Arabs. Until quite recent times much of the slave-trade in the Sahara was carried on by the Arabs. These people used to raid down into the south, carrying off into slavery the negroes of the Niger valley. Since the advent of the French this trade had practically ceased to exist, although isolated cases did even now occur. Musa had probably heard some of the harrowing tales of olden days, and seemed to think he would be putting his head into the lion's mouth should he venture into the very country of the Arabs.

In the ordinary course not much harm was done by capturing slaves in the old days, for they were very well treated, not hard worked, and well fed. In fact, many of these slaves used to refuse to take their liberty when it was offered them. But in the case of slaves being captured by Arabs the position was a very different one. The Arabs were cruel masters, who beat and sometimes killed their slaves for the most trivial offences. Hence they were universally hated and feared by the negro. I pointed out to Musa that this sort of thing could not easily happen at the present day, and that with me he

would be perfectly safe. I think, however, that his nerves were rather overwrought at what he had suffered, and he hardly seemed to be convinced. Under the circumstances it seemed more prudent to allow him to remain behind. Accordingly, I arranged with a French officer to take charge of him until there was a suitable opportunity of sending him with a caravan to the Niger in the autumn. I was sorry to part with Musa for several reasons. He was an excellent, hard-working, and faithful "boy." I had hardly heard him utter a single complaint all through that trying time in the desert. Moreover, his loss was an irreparable one for me. Henceforth I should have to cook my own food and make my own bed. I can hardly say I relished the prospect!

For the first twenty-five miles of our journey north there were two oases, in each of which the water was obtained from artesian wells, and was excellent. The idea of finding wells at such close intervals appeared strange after our former experiences, and it hardly seemed as if we could really be still travelling through the Sahara. The intervening country, however, was typical desert. These two spots had been fertilized by purely artificial means, merely possible because the water here is plentiful and at no great depth below the surface of the sand. The surroundings are desolate in the extreme. A bare, undulating, sandy plain is the characteristic feature of the whole country. No "oueds" or pasturage for camels are anywhere available. Not a leaf or blade of grass is to be seen. Camels are fed on dates procurable at these two oases *en route*. At the second oasis, called Foggaret el Zoua, there is a fair amount of barley grown. After this there was no water for fifty-seven miles, until we reached the mountain range of El Guettera. Here there is a spring in the rock, so that one actually sees a faint trickle of running water—an unusual sight in the desert, and one

THE OASIS OF OUARGLA

This place might appropriately be called one of the outposts of civilization in the Northern Sahara. After crossing over 1300 miles of desert one sees for the first time a collection of flat-roofed houses, a market-place full of bargaining, gesticulating Arabs, and that most evident sign of civilization the electric telegraph. Ouargla exists by reason of her date trade. Here is grown the finest date of commerce, viz. the dessert date as we know it in England.

I had not seen since quitting the Niger, nearly eight weeks previously.

There is rather a pathetic story attached to this spring. About two months earlier, an Arab and his wife were journeying from the north towards Insalah. They had missed their way and exhausted their water supply. First, all their camels died by the road, one by one overcome with thirst. The man and his wife struggled on, hoping to find the spring of El Guettera, and well aware that it could not be far off. The woman next succumbed, but the man kept on, dragging himself wearily along, buoyed with the hope that he must be close to water. The distance, however, was greater than he had thought, and he too died. His body was discovered a few days later by a passing caravan. He had actually arrived within half a mile of the spring, and if he had only known this, poor fellow, he would probably have had strength to reach it !

All this time I had been practising doing valet and cook to myself with indifferent success. I knew sufficient about cooking, of course, to be able to make simple dishes for myself, having frequently done this before, as must anyone who wishes to travel. But when I arrived at the halting-place, generally after a long, hot march, I felt anything but inclined to begin to cook my own repast. Moreover, the difficulties caused by periodic gusts of sand, from which we were not exempt here, made the effort of cooking most fatiguing. At night, too, I used often to feel very disinclined to make my own bed, and again to pack it up when we started once more. Indeed, latterly, I used infinitely to prefer to sleep on one blanket on the sand to getting out my bed and pitching it, with its paraphernalia of bedding. The two Arabs were far too busy with their camels and too ignorant of cooking in any form to be of the slightest assistance. The same argument applied to the soldier "Méhariste." All these people live practically on a handful

of raw dates, and any form of food different from this is unknown to them. How I envied them their simple tastes sometimes !

The range of El Guettera forms the south-western border of the plateau of Tademayt. This rocky plateau runs in a north-and-south direction, and at its foot lies the region of the oases, viz. Insalah, Touat, Beni Abbes, and the eastern extremity of Colomb Béchar. Its elevation above the sea is about 1600 feet. On climbing up to the top of this plateau we had to follow a precipitous track, on each side of which was a deep chasm. In the chasms could be seen the bones of camels, which had evidently, at different times, lost their footing and perished. Fortunately for us we reached the summit in safety, but many times a camel's foot slipped, and his fate hung in the balance. As we progressed across the plateau the surface became more sandy and level. Pasturage, too, was more plentiful, and that night, the 18th of June, we camped in a fine wide "oued," called by the name of Musa Benaïsch, and the camels fairly revelled in the pasturage here, for it was the first good feed they had had since leaving Insalah, and in any case they infinitely preferred the "acheb" here to the diet of dates to which they had so long been accustomed.

Near this spot we came upon an encampment of Chaamba Arabs. They had a large number of camels and sheep. This was the first time that I had seen any sheep since leaving Adrar. Of course, they refused to part with any, so our hopes of fresh meat were soon dashed to the ground. There had been no signs of game hitherto, as indeed was only natural, for there was nothing for them to eat, but now that "oueds" were becoming more plentiful we noticed tracks of Loder's gazelle from time to time.

On the 29th of June we quitted the Tademayt plateau

and descended on to a wide plain of gravelly soil. This plain was flanked on the east and west by the two great sandy deserts known as the Eastern and Western "Great Erg" respectively. The character of the country in the "Great Erg" is unique in the Sahara. The word "erg" in Arabic means sand-hill. And these two vast deserts consist of wide expanses of dunes of soft sand. They stretch almost uninterruptedly from Morocco on the west to Tripoli on the east. Marching in this dreary region is most difficult for man and beast. At every step the feet sink deep into the sand. Moreover the sand drifts on account of the usual prevalent north-east wind, frequently changing the appearance of the sand-hills to such an extent that guides lose their landmarks and miss the way.

But although these "erg" appear so barren there is a fair amount of Saharan vegetation, and pasturage for camels is not difficult to obtain. The sand is a dazzling yellowish white, but in some instances one sees several ridges of reddish sand, showing out very distinctly in contrast to the ordinary colour. From here to the next well it was a two days' march. We had already had several examples of our guide's incompetence. He often appeared to be at fault. But it was not till now that he actually lost the way. He would, I am convinced, have never found it had it not been for the "Méhariste." This man was a typical nomad of the Sahara, and, although having only once previously travelled by this route, he managed to lead us out of our difficulties to Hassy Inifel. "Hassy" is the word for "well," so that nearly every well has the word "hassy" prefixed to its name in the Central Sahara.

At Inifel there is a stone block-house, built by the French some years ago, when this was a military post. In it there were two comfortable rooms, where we could rest

from the heat of the day. We were now about half-way to Ouargla, and so the sight of Inifel cheered us up, making us feel that we had left another milepost behind.

From Inifel the way lay north-east, following close to a big "oued"—the Oued Mya. This dried-up waterway runs for about 200 miles north-north-east to Ouargla, and must have been an important river in its day.

Between Inifel and the next well, called Zmeila, there was a long march of three days, which took us over ninety-five miles of stony ground, lying several miles to the west of the "oued." In this country the camels had rather a rough time, for there was practically no pasturage for them, and our guide, with his usual ignorance, or want of foresight, had not arranged to carry any food for them. To add to his delinquencies, the stupid rascal again lost the way. At the time we were marching at night. He had pointed to his "sokrar" the direction in which he said the well lay, while he made an excuse for dropping in rear of the caravan. I thought he was an unusually long time in regaining his place, and so turned back to see what he was doing. I found him peacefully sleeping on a baggage camel, and, had I not been so angry, I could not have helped laughing at the humorous spectacle that met my eyes. He was in a crouching position, half lying on his stomach, with his legs firmly clasped round the camel's hump. How on earth he could manage to sleep in this extraordinary posture was more than I could understand. His appearance suggested a sack of potatoes thrown over the animal's back! I applied my riding-whip pretty freely to a certain portion of his anatomy, and he awoke with a start, nearly losing the balance he had so marvellously preserved hitherto.

When he had rubbed the sleep out of his eyes, and seemed to realize the situation, he looked ahead of him into the expanse of desert and solemnly declared that we were lost.

THE RESIDENCY AT TOUGGOURT

The official who resides here is a military officer, and administers a large portion of the Sahara, south of Algeria, called the "Annexe of Touggourt." This oasis boasts of a small hotel and is visited by some of the more enterprising tourists from Biskra occasionally. The distance to Biskra is only 125 miles, which can be covered in two days by the desert coach running between the two places.

CHAAMBA ARABS AT TOUGGOURT

A desert caravan has just arrived; the camels have been unloaded and are going to water. The bags in the foreground are the familiar "tellis" of the Northern Sahara. They are made of camel's hair, are very strong, and are used to carry dates.

He said he did not in the least know where we were, and that it was the "sokrar's" fault for not keeping the direction he had given him. We soon came to the conclusion that he was speaking the truth with regard to not knowing where we were, and as to the reason how this had happened it appeared to be immaterial. It is a strange thing how philosophical one becomes in the desert, and the position, which was really sufficiently serious to cause anxiety, did not disturb our equanimity as much as it should have done.

The only thing to do was to strike in the direction in which we knew the "Oued Mya" must lie, and then follow its course up towards the well which lay in its bed. As the "oued" wound about considerably this would lengthen our march a good deal, but this seemed a more prudent course than to make blind "casts" in the desert.

As matters turned out, the "Méharistc" again came to the rescue when day dawned. He rode out at a trot some distance in advance of the caravan, to scout, and, after an hour or so, he returned with the information that he could find the well, without the need for further lengthening our march. He acted up to his promise, and we thus did not go more than some ten miles out of our way. After this our journey was accomplished without further incident to Ouargla, where we arrived on June 29th.

The day before our arrival we passed a small oasis, in which there lived an influential Arab chief. This man invited me to have breakfast with him. Knowing that he would be hurt if I refused, and also that it would be considered, by the custom of the country, that I wished to insult him if I did not accept his hospitality, I agreed to come.

My heart misgave me when I saw the nature of the feast provided. There were several huge dishes of oily-

looking food, the contents of which could only be guessed at. One looked less uninviting than the others. It consisted of rice with some spices, so I hastily indicated that I would take some of that. But I soon discovered that I was not to get off so easily. I was expected to partake of all the dishes. Moreover, if I did not help myself liberally, some hospitably-inclined follower of the chief would fill up my plate for me. I groaned inwardly at the thought of having to eat these horrible-looking things. Finally, I said I was ill after my long travels and could not eat well, so I hoped the chief would excuse my small appetite. But the repast was not yet finished. A whole sheep roasted was now produced. This is prepared in some strange fashion, being well ladled with oil and covered with chili peppers, and is the *pièce de résistance* at an Arab feast. It is called a "meshoui." All this time the chief was eating with great gusto, and what he could not himself consume he handed to his followers, of whom there must have been at least half a dozen present. Their manner of eating was anything but pleasant to watch, especially when I was feeling far from well after partaking of some of these horrible dishes.

It took me a long time to recover from the effects of that meal, and I vowed that at the risk of offending the whole of the Arab race, never again would I consent to touch one of their repasts. When I related this story to the officers at Ouargla they laughed heartily, but said they did not wonder at my being ill!

The country all round Ouargla for many miles is soft sand and undulating. The oasis itself lies in a basin surrounded by low sand-hills. There are about 3000 sedentary inhabitants, and in the date season this number is increased by nomads who come in for dates as they do at Insalah. Ouargla is famed for its fine dates. These are of the best quality, viz. the "deglet-nour." Large

THE MOSQUES AT OUARGLA

These narrow, tall mud towers are ascended by a steep and tortuous stairway. At the summit is a small platform on to which the "muezzin" climbs when he summons the faithful to prayer. These Arabs are one and all fervent Mohammedans; a mixture of creeds such as obtains in India finds no favour with them. The European is to them a Christian dog whose presence is only tolerated because he is feared.

quantities are exported every year to Biskra, whence they are sent to Europe.

From Ouargla to Insalah it was 390 miles, and we had covered this distance in fifteen days, without halting for more than a few hours at a time. This was pretty good going, and our camels were now showing decided signs of fatigue. I was anxious to move again as soon as possible, as time was getting very short. There were still 100 miles of desert between us and Touggourt. I therefore only stayed two days in order to enable the guide to change the tired camels, and on the 1st of July we again set forth.

Between Ouargla and Touggourt there are wells almost every day, and except for the heat there was nothing very trying in the marches compared with what had gone before. I was now travelling very light. I had discarded my tent and bed as useless. My stock of provisions was very low, and at Ouargla I had given away a lot of ammunition, so that now my effects were not numerous. One baggage camel amply sufficed for my needs. On the 3rd of July we arrived at the oasis of Touggourt.

The signs of better accommodation and more comforts in the everyday existence of the inhabitants had been already apparent at Ouargla, but at Touggourt this was all the more so. Indeed, from Ouargla the telegraph runs across the desert to Touggourt and the north, while at Touggourt itself there are such signs of civilization as a small hotel and, of course, the coach to Biskra. At both these towns the Europeans live in well-built houses, some of which are of stone.

At Touggourt I enjoyed the real luxury of a douche. The officers there have an ingeniously contrived douche in their gardens, which is fed by an artesian well. The joy of a proper bath was really indescribable.

Touggourt is already within touch of civilization, for tourists, or a few of the most enterprising among them, come here by the coach in the Biskra season, and put up at the curious little hotel of which the place boasts.

From the top of the big mosque at Touggourt a splendid view is to be had over the desert. I went up there one day with a French officer to have a good look at the desolate region in which I had spent so many days.

I now counted my journey as practically finished.

On the 5th of July I took the coach to Biskra, where we arrived early on the 7th. The coach consists of a ramshackle vehicle, holding three people on the front and three on the back seat. For the first sixty-six miles it is drawn by mules, and for the last eighty-six miles the team consists of three ponies. The track is well defined, but rather heavy going through deep, soft sand. Sometimes the passengers have to get out and help to extricate the cart from the ruts into which it has sunk. The traveller gets well shaken up on the journey, but after a long ride on camels one hardly noticed that. The French sergeant accompanied me as far as Biskra. Biskra did, indeed, mean civilization. Here there was the railway to Algiers, and the fatigues of travelling were made easy. At Biskra there are some six or seven hotels, all of which were empty when I passed through. The season is in the winter, and at that time of year a considerable number of people visit this outpost of civilization. Date palms are numerous, and all water is still obtained from wells. But at Biskra there is no lack of water close to the surface of the ground. At Touggourt the water is so salt that all Europeans have to drink it distilled, but this is not necessary at Biskra.

This oasis is a beautiful spot. Amongst a grove of palms will be seen a pretty little house, by the side of which is a garden well stocked with beautiful green shrubs and flowers. All irrigation is easy here, as water is so plentiful.

Hence the contrast as one emerges from the desert into this paradise of verdure and colour is very striking.

I spent only two hours at Biskra. I had just time to don my one and only flannel suit after drinking a cup of coffee, and pay my respects to the officer in command of the garrison, when I had to be back at the railway station, for my train left at 8.30 that morning.

CHAPTER XXV

By rail to Algiers—A difficult project—The resources of the Sahara

AS I settled myself in the railway carriage I had ample food for reflection over the events of my journey. Naturally the part that had made the most impression on me in many ways was the journey across the Sahara. It had taken me exactly seventy-five days to cover the total distance from Gao to Biskra, nearly 1600 miles. Now that the strain was over I began to feel really fatigued. It was pleasant to sit quietly in the train and watch the passing landscape, so different from what I had been looking at for many a long day.

First the train climbed laboriously up the steep sides of the mountains, which lead up into the high plateaux of Southern Algeria. As we stopped at stations and I noticed the number of Europeans about and the bustle that reigned everywhere as soon as the train stopped, it seemed hard to realize that I was not dreaming, and that I should not shortly wake up to find myself again in the Sahara—among those familiar scenes that I had got to know so well, and which were all summed up in the one word desolation.

But as we got on to the plateaux above Biskra we came into a land of peace and plenty. There were miles upon miles of waving fields of wheat and barley. Prosperous farms were often to be seen standing in the midst of their rich agricultural lands. That year there had been a good rainfall on the plateaux, and in consequence the crops had done even better than usual.

That night we arrived at the big town of Setif, where I had to change and wait several hours for the midnight express to Algiers. I had engaged a sleeping-berth on the train, so I had a comfortable journey to the capital. When I awoke in the morning we were passing through rich vineyards, down the western slopes of the Kabyle Mountains.

I had travelled 3758 miles across Africa, 1560 of which had been through the Sahara. The whole journey had occupied six months and two days. My stay at Algiers was short. I caught the first steamer available to Marseilles, where I arrived on the 11th of June.

On the following night I reached London, travelling via Calais and Dover.

I was two days late for my leave, but under the circumstances I had travelled as rapidly as possible.

After what I saw of the Sahara I came to the conclusion that the project of building a railway across from Algeria to the Niger is never likely to mature. Indeed, I fancy that most Frenchmen who have any experience of the Central Sahara long ago came to the same opinion.

The scheme was mooted some years ago as a useful connecting link between the Algerian railway system and the Niger. The difficulties in the way of carrying this out are almost insuperable. To start with, there is no coal in Algeria or, of course, in the Sahara. Again, if the difficulty of obtaining fuel could be overcome the constant sandstorms would make engineering works hard to construct and harder still to maintain. The railway line would probably be constantly buried in sand, so that some contrivance for clearing the way in front of the engine would be necessary. Moreover, what would be the advantages gained by the construction of such a railway ?

The resources of the Sahara are practically *nil*, while the total values of the caravans which cross this portion of

it do not amount to 1,000,000 francs per annum. Therefore as a commercial enterprise the railway could never pay, and the advantage of having this shorter line of communication between Western Soudan and France, if it could be constructed, would not certainly be worth the enormous expenditure involved. Of course, there is always the difficulty of water supply for the engines. Even along the most practicable route, from Insalah to Gao, wells are few and far between. The output is frequently very slow. Artesian wells would have to be made where possible. In fact, it appears that the resources of the Sahara are so very restricted and incapable of further development unless great mineral wealth be somewhere found, that its future state is not likely to be any brighter than its present condition. The question as to what the Sahara was originally is an interesting one.

The Arabs who wander in the desert around the Oases of Touat and Beni Abbes declare that in ancient times these oases were islands, and that a very big water existed between them and the sea and between them and Taudény in the south.

It seems possible that this theory is correct, for there is a marked depression formed by the Oued Mya, which extends south through the oases towards Taudény, eventually terminating in a big basin, called El Djouf, or "the belly of the desert." Further, from the formation of the country it seems quite possible that the salt-water lakes, or "chotts" of Tunisia, which themselves are, or were, connected with the sea, contributed their waters to this depression, and thus there was at one time a practically uninterrupted waterway from the sea to Taudény. The water from this source then surrounded the oases, isolating them from the rest of the Sahara, which would bear out the legend of these Arab tribes.

APPENDIX

List of principal game shot during the expedition, showing the measurements of best heads obtained.

Oryx leucoryx, 37 inches.
Addax, 25½ inches.
Gazelle, *dorcas*, 10¾ inches.
Gazelle, *Loder's leptoceros*, 11¼ inches.
Ditto, female, 9¼ inches.
Gazelle, *Rufifrons*, 10½ inches.
Haartebeest, *Bubalis*, 18¼ inches.
Haartebeest, *Damaliscus Corrigum*, 19¾ inches.
Duiker, Yellow-backed, 6¼ inches.
Duiker, Crowned.
Duiker, Maxwell's, 2 inches.
Waterbuck, Sing-sing, 28 inches.
Kobus Kob, 20½ inches.
Bohor Reed-buck, 8½ inches.
Elephant. Tusks weighing 52 lbs. each.
Lion. Length along the contour, 9 feet 2 inches.
Hippopotamus. } Measurements not recorded.
Bushcow. }

INDEX

Abdul Karim, 228
Abeibera, wells, 282, 284
Acheb, a desert herb, 292, 330
Addax in the Sahara, 284
Adrar country, 266, 270, 271, 273, 277, 278, 280, 284, 297, 298, 310, 316
Africa, 17
Agamhor, wells of, 257
Ahnet wells, 307, 310, 311, 312, 314
Akka, 173, 174
Algeria, 134, 287, 338, 339
Algerian rams, 180
Algiers, journey to, 17, 323, 339
Alimamy, West African chief, 57
Amool Gragim, 307
Ansongo, 134, 223
Arabs, Berabeesh, 231
— Chaamba, 324
— Kountah, 226, 231, 250, 253, 265
— Saharan, 304, 316, 318, 320, 321, 323, 327, 329
— Western Soudan, 192, 219, 231, 245, 272, 282, 289
Architecture, Western Soudan, 154
Aresou, a Saharan plant, 300
Armas, race of, 244
Arrej, or camel saddle, 296
Artesian wells, 319, 335, 340
Atlas Mountains, 193
Azalai, salt caravan, 230

Bagwé River, 36
Baiima, 22
Balandougou, 92, 103
Ballaini, a musical instrument, 54
Bamako, 70, 73, 85, 90, 103, 104, 107, 111, 113, 118, 119, 120, 133, 195, 233, 240, 241
Bamba, 239, 241
Bambara language, 18, 69
— people, 122, 123, 136, 141, 192, 227, 236
— Maaundée, 207, 208, 217
Bandiagara, 128, 157
Bani River, 150, 156, 157, 159, 176
Baobab tree, 68
Bara Issa, River, 173, 182, 190, 191, 195, 204, 219, 220, 222
Barges, Niger, 103, 145, 154, 176, 233, 235
Barley, 318, 338
Barter, articles of, 234
Barth, explorer, 228
Beehives in Guinea, 66
Beni-Abbes, 318, 330, 340
"Bend" of Niger, 128, 130, 131, 164, 177, 187, 193, 206, 229, 235, 239, 243
Beyla slaves, 271
Bird life, 38, 39, 40, 41
Biskra, 318, 323, 335, 336, 337, 338
Bo, Sierra Leone, 20
Bobo Djilassu, 67, 141, 144, 148
Boia tramway, 22
"Borgou" herb, 171, 177, 186, 221, 238, 239, 243
Bosos, fishermen, 151, 192, 221, 222
"Boucle," the, 128
Boundary of Algeria-Soudan, 287
Bouramaka Yaroro, 203
Bourassa wells, 284, 285, 287
Bourem, 242, 243, 253
Braimah, my hunter, 78, 81, 82, 86, 87
Bread, cost of, 190
Breeding of Soudan horses, 140, 222
Bullock transport, 217
Bunce River, 23
"Bundu" society, 23, 31, 44
Buré, 101
Burial rites of Korankos, 43, 44
Bushcow in Konnoh country, 34
Bush fires in West Africa, 37, 38, 52
Bushfowl in French West Africa, 39, 110, 179, 218
Bustard, 40, 164, 178, 218
Butter-making at Bamako, 130

Camels on the Niger, 132, 144, 217, 231

Camels in the Sahara, 245, 250, 252, 257, 258, 259, 260, 261, 262, 268, 276, 279, 286, 287, 292, 295, 298, 300, 320, 328, 332
Camping on the Niger, 148
Cancer, tropic of, 280
Canoe-building, 193, 195
Canoes on the Niger, 185, 193, 222, 226
Caravans in the desert, 242, 269, 286, 305, 323, 324, 339
Carriers, French Guinea, 49, 52, 81, 92, 94
— Kissy, 26
— Mendi, 26
— Upper Senegal and Niger, 113
Castes, in French Guinea, 57, 58
Cattle, 171, 197, 238
Cave-dwellers, 215
Chaamba Arabs, 324, 330
Chad, Lake, 110
Charlotte Ville, 160, 161
Chiefs in French Guinea, 93
Chop-box, definition of, 21, 141
Chotts, 340
Clay in the Niger Valley, 195, 243
Coach to Biskra, 336
College, Arabic, at Djenné, 161
Colomb-Béchar, 318, 323
Cook, my native, on the journey, 18, 70, 236
Corn-growing, 318
Cotton-growing in Sierra Leone, 27
— West Africa, 28, 150
Couscous, 234, 275, 286, 306
Cowbird, peculiarity of, 41
Cram-cram grass, 238, 265, 268, 291
Creoles, description of, 20
Crested crane, 241
Crocodiles, 146, 147
Crown-bird, 241

Dahomey, 130, 245
Dakar, 153, 228
Dances, native, 65, 66
Daru, head-quarters of Frontier Force, 25
Dates, in the Sahara, 275, 286, 318, 319, 320, 328, 330, 334
Date palms, 239, 317, 318, 319, 336
Defile of Tosaye, 241, 242
De Franco, Captain, 140
Déglet-nour, dates, 319, 334
Délou, waterbucket of the desert, 250
Diafarabé, 154, 176
Dialakoro, hunting village, 78
Digue, Commandant, 133
Dioula, trader of Western Soudan, 63
Djenné, Holy City of Western Soudan, 153, 154, 157, 159, 161, 167, 176, 192, 229
Domaggaran, 311
Donkeys in the Western Soudan, 223, 231, 284
Douentza, in the Niger "Bend," 202, 267, 208, 210
Doulajan, 80, 82
Doves in the Sahara, 256
Driver ants, 168
Drums, use of, as signals, 76
Duck on the Niger, 70, 148, 172, 174, 175, 188, 218, 240
Duiker "crowned," 60
Dum palms, in the Niger Valley, 190 193, 197

Egrets on the Niger, 165
Eguerrer, Oueds, 265
El Bashir, camel driver, 285, 286, 287, 297
El Gouirat, wells of, 316
El Guettera, spring, 328, 329, 330
El Jibal, 312
El Djouf, the "Belly of the Desert," 340
Elephant bathing at night, 211, 212
Elephant in the Niger Valley, 18, 59, 80, 82, 84, 85, 95, 96, 211
Elephant skulls at Gao, 243
Erg, the Great, 331
Erg-Iguidi, 272
Escort to Kidal, my, 245, 246, 251, 267
Es-Souk, 229, 277
Ethel, Saharan vegetation, 290, 291, 298
Explorers in North and West Africa, 227, 228

Falama, French Guinea, 76, 78, 85, 89, 111
Fama, the, of San Sanding, 151
Farakoro village, 46, 47
Faranah, French Guinea, 51, 53, 56, 84
Feliko, River, 36
Ferrière, Captain, 225
Fetish charms of hunters, 83, 86, 87
Fie River, 90, 95, 99, 101, 102
Firearms, antiquated, 197
Fishing on the Niger, 105
Fish-tanks on the Niger, 186, 238
"Flamboyant" tree, 144
Fogaras, 318

Foggaret-El-Zoua, 328
Foucauld, Vicomte de, 325
Freetown, 17
Frontier Force Battalion, 25
Frontier rock, Sierra Leone, 36
Fruit in Guinea, 66
Fruit in Upper Senegal and Niger, 123
Fuel for Niger launches, 144, 148
Fulani, 57, 64, 74, 186, 190, 192, 199, 200, 202, 207, 209, 217, 222, 238
Fulani cattle, 171, 197, 238, 240
Futa Jallon country, 63, 64, 72, 200

Gadel, Commandant, 236
Gangaber, on the edge of the Sahara, 247
Gao, 225, 226, 233, 234, 237, 243, 251, 252, 254, 257, 274, 279, 284, 295, 317, 338, 340
Garangis, caste of, 57
Garden in French West Africa, 65, 123, 149
Gauba, the ostrich farm, 179, 182, 184
Gazelle of the Sahara, 179, 196
— "Red-Fronted," 178, 240, 255
Gazelle, "Loder's," 265, 284, 297, 298, 330
Geese on the Niger, 70, 172, 174, 175, 188, 218
Giraffe in the Niger basin, 18, 241, 246, 247
Giraffe skins for manufacture, 246
Goats on the Niger, 156, 238
— in the Sahara, 256, 273, 289
Gold in French Guinea, 91, 101
"Gold mohur" tree, 144
Goose, the "bio-lou' species, 175
Great Erg, 230
Grhess, a variety of date, 319
Ground nuts, 62, 63, 130
Guerba, a leather vessel, 249, 250, 308, 309, 315
Guides in the desert, 248, 250, 261, 263, 264, 269
Guinea-fowl, 39, 110, 179, 270
Guinée, a trade cloth, 234, 256, 270
Gundam, near Timbuctu, 228

Haarta, Saharan plant, 300
Haartebeest, 83, 178, 204, 206
Habbés, cave-dwellers, 215, 216
Halley's Comet, in the desert, 287
Harmatan, a north-east wind, 24, 42, 43
Hassy, Arabic term for well, 331
Hausas in the Western Soudan, 192, 203, 236, 311
Head-dress of West Africans, 123
Highwaymen in the desert, 312
Hippopotamus, 79
Hoare, a Mendi charm, 29
Hoggar Tuaregs, 287, 300, 310, 311, 312, 313, 325
Holy City of the Western Soudan, 153
Hombori Mountains, 215
Hornbill, habitat of, 38
Horos, castle of, 57
Horses, native, 71, 125, 131, 139, 140, 201, 209, 222, 231
Hotels in Western Soudan, 132, 134
Hourst Expedition, 138
Hrabis, caste of, 57
Human Leopard Society, 30
Hump of the camel, peculiarity, 280, 295
Hunters, types of, 78, 195, 207, 208, 210
Hunting, native methods of, 60
— in French West Africa, 78
Huts, native, 190, 202
Hyenas, 83

Iforas in the Sahara, 270, 271, 272, 273, 274, 276, 277, 278, 283, 287, 310, 324, 326
Ihagareen, Tuareg chiefs, 271
Illimane, Mount, 311
Imbelram, wells of, 315
Imrads among Tuaregs, 271
Inifel, the wells of, 331, 332
In Ouzel, well at, 285, 286, 287, 288, 289, 290, 294, 297
Insalah, 249, 251, 269, 274, 275, 279, 315, 330, 331, 340
Insects in the "bush," 116
Inundations of the Niger, 158, 190, 201, 220
Inzize, 305
Issa-Ber, River, 173, 176, 182, 184, 186, 190, 222
Ivory Coast, 130

Jilingé village, 98, 99, 100, 101, 102
Joliba River, 36, 156
— meaning of the word, 36
Jomongonas, 98, 99, 101
"Juju" in West Africa, 29, 83, 87, 88

Kaballa, in Sierra Leone, 47
Kabara, port of Timbuctu, 173, 177, 220, 221, 223, 237

Kadi, a native judge, 153
Kamaraia, 54
Kangaba, 90, 110, 111
Kanioumé, 207
Kankan, French Guinea, 70, 73, 74, 75, 103, 115, 131
Kano, 192
Kari-Déna, Tuareg chief, 272
Kati Plateau, 118, 120, 124, 125
Kayes, Senegal Colony, 129, 130, 150, 151
Kerchouel, 254
Kidal, 245, 246, 250, 251, 252, 254, 256, 266, 267, 268, 270, 274, 275, 276, 277, 281, 298, 326
Kiénéfala, rapids on the Niger, 136, 137, 241
Kissidougou, 52, 55
Kissy carriers, 26
— — mode of carrying, 27
— country, 32
— wars, 32
Kob, in West Africa, 44, 45, 80, 106, 110, 184, 221, 240
Kofung secret society, 44
Kola nuts, 86, 87, 203
Konakry, 63, 228
Kondundu, Sierra Leone, 35
Konnoh country and people, 32, 33
— — bushcow in, 34
Koran, use of in charms, 29
Korankos, rites of, 43, 44, 45
Korioumé, 223
Koulikoro, on the Niger, 122, 127, 129, 133, 148, 150, 151, 195, 222
Koulouba, 126, 127
Kouroussa, 56, 60, 63, 64, 67, 68, 70, 73, 103
Kruto, Sierra Leone, 43
Ksour, Arabic village, 317, 320
Kundema, Sierra Leone, 35
Kurorua, lake of, 215, 216
Kwarra, name for the Niger, 156

Ladies, European, in West Africa, 55, 73, 120, 134, 222
Laing, Major, 227
Lake District of Middle Niger, 206, 207
Langel, Lieutenant, 134
Laperine, Colonel, 316, 317
Launch, journey on, 141, 144
Lenz, explorer, 228
Leopard in Niger Valley, 83, 181
— raid by, 181
Level, Mr., 150
Limba natives, 44
Lion in Niger Valley, 18, 83, 179, 187, 197, 198, 199
— cubs as pets, 165, 166
Litham of Tuaregs, 270, 271, 312

Macina Province, 131, 157, 159, 161, 243
Madambougou, graves at, 138
Mafindo, village of, 27
Mafou River, game on, 56, 59, 60
Mahomed, my guide, 269, 277, 282, 284, 286, 288, 289, 297, 298, 299, 304, 307, 308, 312, 313, 316, 326
Maize in West Africa, 62, 111
Maje, explorer, 139
Malbranque, Mr., 176
Malinké language and people, 18, 57, 64, 71
Mamadu, my servant, 69, 70, 81, 89, 92, 93, 94, 96, 100, 102, 110, 112, 118, 185, 188, 189, 236
Mandingoes, distribution of, 33, 67
Mannagézé, 116
Marabout, a Niger bird, 241
Markets of French West Africa, 74, 112, 122, 130, 131, 192
Marriage customs, Sierra Leone, 31
Mauretania, 107, 144, 274
Méhari, riding camel, 270, 324
Méhariste, 322, 329, 331, 333
Meli River, passage of, 32
Mendi carriers, 26
— — mode of carrying, 27
— paganism of, 29
— secret societies, 29
Mendis, charms of, 29
Meshoui, an Arab dish, 334
Mesoued, for desert travel, 248, 313
Millet-growing, 111, 158, 192, 202
Milo River, 73, 76
Mimosa trees, 163, 178, 204, 206, 246, 254, 266, 289, 290
Moa River, Sierra Leone, 25
Mohammedanism, progress of, 33, 109, 200
Mopti, on the Niger, 123, 156, 157, 158 to 170, 171, 173, 175, 176
Mopti, King of, 159, 160
Monoroues, stern-wheelers, 142
Moorish occupation, 224, 229, 230, 239
Moors in Western Soudan, 74, 107, 108, 109, 131, 239, 244
Morocco, 225, 227, 228, 325, 331
Mosques, 230, 244
— at Djenné, 153
Mosquitoes, 96

Mossis, 192
Mouyidir in the Sahara, 314, 315
Musa, my Hausa cook, 236, 285, 287, 288, 289, 297, 304, 313, 316, 327, 328
Musa-Benaïsch, 330
Music of natives, 54

Nafadié, 103
Niafounké, 110, 141, 173, 177, 178, 179, 182, 185, 191, 222
Niandan, River, 70, 71
Niangaye, Lake, 204, 205, 206, 207, 208, 210, 215, 216, 218, 219
Niansumana, 76
Niéger, Captain, 322, 323
Niger, Middle, 17, 67, 134, 157, 159, 171, 172, 179, 200, 219, 222, 229, 240, 244, 251, 276, 318, 328, 339
Niger, navigation of, 70, 73, 122, 134, 135, 136
Niger, sources of, 36, 46
— Upper, 17, 51, 56, 63, 70, 77, 89, 90, 92, 99, 100, 101, 103, 104, 105, 107, 109, 110, 111, 115, 118, 132, 135, 172, 244
Niger Valley, 18, 327
Nightjar, standard-winged, 41
Night marching in the Sahara, 264, 300
Nioro, Western Soudan, 140

Oases of the Sahara, 268, 315, 316, 317, 328, 333, 334, 335, 336, 337, 340
Obb, Commandant, 223
Odienné, Ivory Coast, 82, 85
Ophthalmia in the desert, 308
Oribis, 60, 110
Oriole, the golden, 39
Ornaments, native, 77, 123
Oryx, white (leucoryx), 265, 284
Ostriches, 132, 182, 183, 218
Ostrich farm, Middle Niger, 182, 183
Othman, a guide, 297, 298, 312, 313, 316
Ouargla oasis, 323, 332, 333, 334, 335
Oued Mya, 332, 333, 340
Oueds in the Sahara, 242, 265, 268, 274, 290, 328, 330
Ouillimiden Tuaregs, 253, 272
Oysters in Lake Dhebo, 173

Palm-wine drinking, 50
Pasturage in the Sahara, 253, 257, 260, 291, 320, 328, 330, 332
Pelicans on Lake Niangaye, 218
Pendembu railway terminus, 19, 22
— — — a night at, 26
Pigeon, varieties of, 40, 148
Plantain-eater, violet, 38
Poro secret society, 29, 30, 31, 44
Potters at work in the "Bend" of the Niger, 185
Presents to natives, 97, 98

Rahla, a riding saddle, 296
Railway, Algerian, 311, 336, 337, 338, 339
— French Guinea, 63, 64, 130
— Oran, 323
— Senegal and Niger, 120, 129, 130, 133, 161
— Sierra Leone, 21, 22, 23, 24, 25
— Trans-Saharan, 339
Rapids on the Niger, 136, 137, 241
Reed-buck, Bohor, 221
Réné Caillé, 141, 228
Reservoir of Lake Dhebo, 172, 173
Rice-growing, 111, 157, 192, 202, 243
— mill at Mopti, 161, 162
Rio del Oro, 325
Roads in French Guinea, 53, 54, 75, 107, 111
— in Sierra Leone, 35, 36
— in Western Soudan, 122, 161
Rubber vine, 62, 74
— trade, 74, 75, 115

Saddle of native horses, 188, 189
Saddles, camel, 248, 275, 295, 296
Sahara, edge of the, 178, 193, 242, 252, 256, 272, 290, 325
— Central, 266, 280, 310, 316, 317, 321, 325, 339
— journey across, 17, 248, 249, 307
— languages of the, 19
— vegetation of the, 290, 291, 292, 300, 331
Salt caravans, 202, 230
— mines of the Sahara, 74, 307
Salutations, native, 145
Samory, King, 67, 68, 69, 91
Sand-banks, 70, 145, 237
— -dunes, 239, 319, 331, 334
— -flies, 96, 149
— -grouse, 178, 218
— -storms in the desert, 288, 289, 302, 303, 306, 321
Sankaran, plains of, 46, 48, 51
Sankarani River, 78, 85, 90, 91, 95, 99, 101

Sansanding, on the Niger, 151, 152, 153
Saraféré, 173, 187, 191, 192, 193, 195, 197, 201, 203, 207
Sarafinian, Customs post, 48
Scorpion, incident at Bo with, 24
Sébi, the haunt of lion, 187, 201
Ségou, on the Niger, 149, 150, 151, 152
Senafou, a native of, 90
Senegal River, 74, 107, 110, 129, 132, 150, 233, 234
— — navigation of, 129
— haartebeest, 204, 205, 206, 208
Seriamou, 220
Sétif, Algeria, 339
Shea-butter tree, 116, 117
Sheep of the Niger, 156, 180, 238
— of the Sahara, 256, 273, 289, 290
Shi, tree of, 116
Sibo, Niger Valley, 184
Sierra Leone, Colony of, 17, 245
— — railway of, 19
Siguiri district, 75, 97, 101, 104, 111
Sikasso, Upper Senegal and Niger Colony, 144, 159
Sirocco, 230
Slavery in French Guinea, 58
— among the Arabs, 327, 328
Smuggling on Sierra Leone border, 48
Sofas of King Samory, 67, 68, 92
Sohré, caste of, 57
Sokolo, Western Soudan, 140
Sokrar, camel driver, 333
Sonrhais of the Niger, 154, 186, 192, 221, 222, 227, 229, 236, 237, 238, 244, 272, 277
Sotuba, rapids of, 137
Spears as a native arm, 209, 271
St. Louis, Senegal Colony, 129, 161
Stone Age in the Sahara, 277
Suk, a charm of the Mendis, 29
Sun spectacles, use of, 267, 270, 271
Susu native as my cook, 18
— people, 64

Tademayt, plateau of, 330
Tamanrasset, 325
Tanezrouft of the Sahara, 245, 279, 287, 294, 297, 298, 299, 300, 301, 306, 310, 311, 315, 326, 327
Tango-Maré, 219
Taoundert, 285, 287
Taudény, salt mines, 230, 240
Tea, Arabic, 283
Teal, 218, 240
— grey, 175, 190, 204
Telegraph, electric, 239, 246
Telegraphy, native, 76
Telemsi, "Oued" or "Wad," 242, 265
Tell, the country of, 326
Tellak, a camel dagger, 271
Tellis, a camel bag, 319
Temacheq, Tuareg language, 272, 313, 326
Tembiko River, 36
Tembikunda Mountains, 34, 42, 156, 172, 240, 241
Tennis at Koulikoro, 135
Tide on Lake Niangaye, 205
Tidikelt, 315, 317
Timbuctu, 17, 69, 110, 121, 125, 135 141, 151, 164, 167, 176, 177, 179, 191, 195, 202, 217, 220, 222, 223, 243, 272
Timissao, 297, 298, 299, 300
Tindéran, wells of, 263, 264, 265
Tinsida, in the "Bend" of the Niger, 216
Tirailleurs, Senegalese, 251
Tirik, Jibal el, 297
Tit, Touat oasis, 322, 323
Tobacco-growing in Western Soudan, 149
Tobacco, its value to travellers, 28, 283
Tombola, 104, 106, 109
Tondibi, 243
Tosaye, defile of, 241, 242, 243
Touat oasis, 282, 322, 330, 340
Touggourt, 323, 335, 336
Trade in French West Africa, 73, 74, 75, 108, 130, 161
Trapping game in Guinea, 62
Tribal marks, 90
Tripoli, 228, 318, 331
Trypansomiasis, 33, 140
Tsetse fly, where met, 32, 140
Tuaregs of the Sahara, 19, 192, 202, 219, 224, 229, 238, 240, 253, 263, 270, 271, 272, 273, 274, 275, 283, 287, 289, 310, 316, 325, 326
Tunisia, 230, 340
Tusks of elephants, 214
Twins, custom of killing, 45

Upper Senegal and Niger Colony, 110, 120
— — — — Lieut.-Governor of, 126, 127

Vedette, a Niger launch, 142
Villages, Fulani, 190, 191

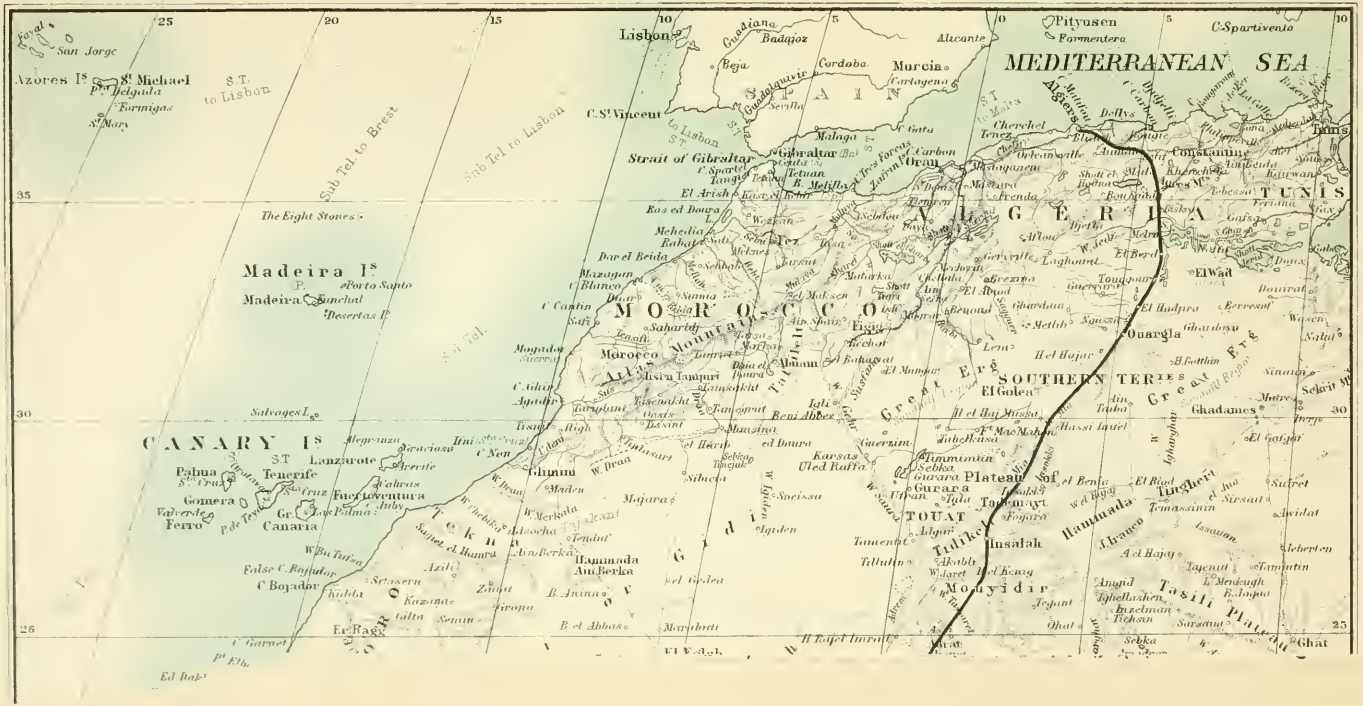
Wagadugu, town of, 192
Wart-hog in French Soudan, 162, 163, 164, 167, 179, 184
Wasulu country for sport, 56, 60, 75, 80, 82, 83, 84, 89, 90, 95, 96
Waterbuck in the Niger Basin, 59, 81, 184
Waterfowl on the Niger, 70, 148, 172, 174, 175, 184
Water, means of transporting, 249, 250
Water-skins in the desert, 249, 267, 273, 275, 294, 295, 308, 309, 316
Wells in the Sahara, 225, 249, 250, 253, 254, 257, 263, 264, 267, 273, 274, 282, 284, 285, 297, 298, 299, 307, 315, 316, 331, 332, 333, 335, 340
Wheat, African, 228, 234, 338
White ants in Africa, 167, 168
Widow weaver, a bird of West Africa, 41
Winds of the Niger, 176
Winds in the desert, 192
Winds on Lake Niangaye, 205
Wool-making on the Niger, 181

Yakubu, a character at Timbuctu, 226, 227
Yellimamis, caste of, 57
Yonni tramway, 22

Zaberma, 236
Zariba for lion, 179
Zinder, on the Niger, 253
Zmeila, wells of, 333

WILLIAM BRENDON AND SON, LTD., PRINTERS, PLYMOUTH

Map showing the Route of Captain Haywood's Journey


MEDITERRANEAN SEA
SPAIN
ALGERIA
TUNIS
MOROCCO
Madeira Is.
CANARY Is
Azores Is
Lisbon
Gibraltar
Strait of Gibraltar
Algiers
Oran
Tunis
Tripoli
Malaga
Cordoba
Murcia
Alicante
Pityusen
Formentera
C. Spartivento
Constantine
Bona
Bougie
Philippeville
Biskra
Laghouat
El Wad
Ouargla
Ghadames
Ghat
Tuggurt
Wargla
Tebessa
Gafsa
Kairwan
Sfax
Gabes
Sousse
Monastir
Mehedia
Tedjerouine
Tafilet
Fez
Mequinez
Rabat
Mogador
Morocco
Saharidy
Mt. Atlas
Sus
Wad Draa
Tarudant
Agadir
Santa Cruz
Mogadore
Safi
Azamor
Mazagan
Casa Blanca
Tangier
Ceuta
Tetuan
Melilla
Arzila
Larache
Salee
Salvages Is.
Madeira
Porto Santo
Desertas
The Eight Stones
Lanzarote
Fuerteventura
Canaria
Palma
Ferro
Gomera
Tenerife
Graciosa
Alegranza
Bahia
Gharian
Mesellata
Mesurata
Sokna
Tripoli
Gadames
Ghadames
Ghirza
Mourzouk
Tibesti
Tummimin
Sebka
Gurara
Tademayt
Tidikelt
Insalah
Tasili Plateau
Hammada
Tanezrouft
Tuat
Igidi
Great Erg
Southern Territories
Great Erg
Ghadames
Ghat
Sebkra
Sokna
Tripoli
Gabes
Sfax
Kairwan
Sousse
Monastir
Tunis
Bona
Constantine
Philippeville
Bougie
Algiers
Oran
Tlemcen
Mascara
Tiaret
Laghouat
El Wad
Ouargla
Wargla
Biskra
Tebessa
Gafsa
Kairwan
Sfax
Gabes

Among the Eskimos of Labrador.

A record of five years' close intercourse with the Eskimo tribes of Labrador.

By Samuel King Hutton, M.B., Ch.B., Vict.

Demy 8vo. With 47 illustrations and a map.

Price 16*s.* nett.

The inhabitants of this tract of land, one of the most desolate, rugged, and inhospitable countries on this globe, are steadily decreasing in number. Whether in years to come they will be but a memory, or whether civilisation will give them a fresh lease of life, cannot at present be determined. They are an orderly, quiet, and regular people, who do not require the attention of either police or magistrate. They bear the rigour of their stern and inhospitable climate with cheerful fortitude, but so severe is it, and so hard are the means of living, that it is very rare for anyone to reach the age of seventy. Dr. Hutton has given a lively and extremely interesting account of his sojourn amongst them, their manners and customs, and many an amusing incident and perilous journey that took place.

The Tailed Head-Hunters of Nigeria.

An account of an Official's seven years' experiences in the Pagan Belt of Northern Nigeria, and a description of the manners, habits, and customs of some of the native tribes there. By Major A. J. N. Tremearne, B.A. (Cantab.), F.R.G.S., F.R.A.I., late Hausa Scholar, Christ's College; Hausa Lecturer, and First Diplomé in Anthropology, Cambridge; author of "The Niger and the West Sudan," "Fables and Fairy Tales," *&c.*

With 38 illustrations and a map. Price 16*s.* nett.

One of the author's aims in writing this book has been to show how much the uncivilised natives of Northern Nigeria resemble some other aboriginal races, possibly even our own remote ancestors, and, incidentally, to prove that they are by no means as black in many ways as they are painted. Having served in different parts of West Africa for the greater part of ten years, first as a Military then as a Police Officer, and subsequently in a Political and a Judicial capacity, he has possibly a wider view of West African things in general than many writers on the country.

Head-hunters are found in various parts of the world, notably amongst the Dyaks and South Sea Islanders, but that they should combine with this the curious custom of wearing artificial tails is surely unique in the annals of anthropology.

SEELEY, SERVICE *&* CO., Ltd., 38 Great Russell Street.

NEW AND CHEAPER EDITION

AMONG THE WILD TRIBES OF THE AFGHAN FRONTIER.

A Record of Sixteen Years' Close Intercourse with the Natives of the Indian Marches. By T. L. PENNELL, M.D., B.Sc., F.R.C.S. With an Introduction by FIELD-MARSHAL EARL ROBERTS, V.C., K.G. With Thirty-seven Illustrations and Two Maps. Extra crown 8vo, 5s. net.

"The book was eagerly welcomed on its first appearance, and deserves to take its place among missionary classics."—*British Weekly.*

"A full and modest record of a work of the value of which Lord Roberts speaks highly, and throws many new sidelights on the wild border tribesmen."—*Times.*

"A brilliant example of what can be done (and what is being done in nearly all the dark quarters of the world) by one resolute man who is fired with the spirit that animated the early disciples. . . . His book can be warmly commended, too, to those who merely delight in narratives of travel and adventure."—*Daily Mail.*

"A veritable storehouse of facts and deductions presented in most attractive fashion."—*Daily Telegraph.*

"A record of real merit, a record of brave work, travel, and no little adventure, told without pretentiousness, and lightened by a true literary sense and much humour."—*Guardian.*

"The whole book is interesting in the highest degree."—*Spectator.*

"Seldom does a volume appear of such immediate and absorbing interest."—*Graphic.*

SECOND EDITION

AMONG INDIAN RAJAHS AND RYOTS.

A Civil Servant's Recollections and Impressions of Thirty-seven Years of Work and Sport in the Central Provinces and Bengal. By Sir ANDREW H. L. FRASER, K.C.S.I., M.A., LL.D., Ex-Lieut.-Governor of Bengal. With 34 Illustrations and Map. Medium 8vo, 18s. net.

"Will take its place with the great standard authorities on our Indian Empire. Every page deserves to be studied."—*British Weekly.*

"Sir Andrew Fraser writes with solid judgment and sound information."—*Daily Graphic.*

"The volume will win a prominent place on the Indian shelves of all good libraries."—*Contemporary Review.*

"Sir Andrew is never dull, and it is only when the reader has finished the book that he realises how much he has learned of India and her people."—*Westminster Gazette.*

"The book is a weighty deliverance of a Christian man, who, being well qualified to do so, has spoken out frankly and candidly on a number of points on which it is important there should be no misunderstanding in the minds of the British people."—*The Christian.*

"A fine record of a valuable and useful life, told with that quiet modesty that is characteristic of all true worth."—*Methodist Recorder.*

"An extremely interesting and informing book."—*Eastern Morning News.*

SEELEY, SERVICE & CO. LIMITED

FORE AND AFT

THE STORY OF THE FORE AND AFT RIG FROM THE EARLIEST TIMES TO THE PRESENT DAY

By E. KEBLE CHATTERTON

AUTHOR OF "THE ROMANCE OF THE SHIP," "SAILING SHIPS AND THEIR STORY," ETC. ETC.

WITH ONE HUNDRED AND FIFTY ILLUSTRATIONS AND COLOURED FRONTISPIECE BY

C. DIXON, R.I.

Sq. Ex. Royal 8vo. Price, 16s. nett

Mr. Chatterton is an ardent yachtsman, and has made this subject his special study. The information he gives has been acquired during a lengthened visit to Holland, the home of the Fore and Aft rig, as well as from old manuscripts and histories. He traces the evolution of this rig from the early Egyptians to the present day, and shows how great an influence the Dutch style has had on English craft. The book has been written not only for yachtsmen, but for all who are interested in sailing-boats, and with this in view a glossary of nautical terms has been added. The information is much of it curious, but all interesting. The frontispiece is by Mr. Charles Dixon, R.I., who is well known as a marine painter, and there are besides a great number of excellent and extremely interesting photographs and diagrams.

THE MAKING OF A GREAT CANADIAN RAILWAY

THE STORY OF THE PIONEER SURVEY, THE SCIENTIFIC SURVEY, AND THE CONSTRUCTION OF THE NEARLY COMPLETED GRAND TRUNK PACIFIC RAILWAY, FROM THE ATLANTIC TO THE PACIFIC, WITH SOME ACCOUNT OF THE THRILLING ADVENTURES OF ITS CONSTRUCTORS

By F. A. TALBOT

AUTHOR OF "THE NEW GARDEN OF CANADA"

Demy 8vo. With Forty-three Illustrations and a Map. Price 16s. nett

Few people can comprehend what a stupendous task the making of a transcontinental railway is, except those actually engaged in the operations. Mr. Talbot was fortunate enough to be chosen to accompany the party in order to describe one of the greatest engineering feats ever undertaken. His description is vivid and engrossing. It is not a mere sprinkling of men, but a vast army, with scouts, engineers, medical corps, commissariat, and all the other equipment of a force invading a hostile country, that sets out to battle with nature. Hardships have to be endured, and dangers faced, so none but those who are physically most fit are chosen. Bottomless swamps must be filled, roaring rivers bridged, all but impenetrable forests penetrated, and hills blown away with dynamite and gunpowder. The fascination of this book is enhanced by a large number of beautiful illustrations.

SEELEY SERVICE & CO., LTD., 38 GREAT RUSSELL STREET.

*

THE NEW ART LIBRARY

EDITED BY

M. H. SPIELMANN, F.S.A., and P. G. KONODY

"The admirable New Art Library."—*Connoisseur*

THE volumes in this series are primarily intended for the use of Art Students. The instruction given is of the most thorough kind, and is based on long practical experience and intimate knowledge; the names of the authors will be a sufficient guarantee for the high excellence of their work. The greatest care is being bestowed on the illustrations, which are very numerous and in a remarkable degree explanatory of the text. It may be doubted whether artistic processes have ever before been so clearly illustrated.

It is hoped that the volumes will also be welcomed by those amateur artists who, although they do not follow art for a livelihood, are in no way content with inferior craftsmanship, but are earnestly bent on acquiring a sound and workmanlike method, based upon knowledge of technical processes in all their details.

But there is a third class to whom these volumes may prove of high interest the lovers of art, who, though they produce nothing themselves, are not content with an unintelligent enjoyment of artistic creations. No one can be said to understand them who is ignorant of the principles on which they are executed. The special enjoyment which an artist finds in a work of art may be shared by the art-lover if he will take the pains to examine it in the same way as the professional artist, and thus gain some understanding of the purely technical means of expression employed. The cultivation of a correct taste is thus assured—the knowledge not only of *what* to like, but *why* to like it. Appreciation is thus founded on reason.

The prices of the volumes will be lower than those of any similar publications; at the same time, the publishers believe the series will be as complete, thorough, and practical as any hitherto issued, and will contain many novel features not hitherto found in kindred works. The intention has been to meet the requirements of students and of Art Schools throughout the country, who will at length be able to procure trustworthy and authoritative instruction books at a modest expenditure.

VOL. I.

The Practice of Oil Painting & Drawing

By SOLOMON J. SOLOMON, R.A.

With 80 Illustrations from Mr. Solomon's Drawings and other sources. Extra crown 8vo. 6s. net

"The work of an accomplished painter and experienced teacher."—*Scotsman.*

If students were to follow his instructions, and, still more, to heed his warnings, their painting would soon show a great increase in efficiency."—*Manchester Guardian.*

"The drilling that you get at the cost of many fees in an art school is all to be found at a single sitting in this book."—*Illustrated London News.*

LONDON: SEELEY & CO., LIMITED, 38 GREAT RUSSELL STREET, W.C.

THE NEW ART LIBRARY—*Continued.*

VOL. II.

Human Anatomy for Art Students

BY

SIR ALFRED D. FRIPP, K.C.V.O., C.B., M.B., M.S.(Lond.), F.R.C.S.

Surgeon-in-Ordinary to H.M. the King; Lecturer upon Anatomy at Guy's Hospital, London

AND

RALPH THOMPSON, M.B., Ch.M., F.R.C.S. (Eng.)

Senior Demonstrator of Anatomy, Guy's Hospital

And an Appendix on Comparative Anatomy, and Illustrations, by HARRY DIXON, M.S.B.S.

Profusely Illustrated with Photographs, and by Drawings by INNES FRIPP, A.R.C.A.

Master of Life Class, City Guilds Art School

With 151 *Illustrations. Square extra crown* 8vo. *7s. 6d. net*

"An ideal manual for the student of the most difficult and most essential branch of art study." *Liverpool Daily Post.*

"This book, with its abundant and excellent illustrations, will be a real help to knowledge." *Pall Mall Gazette.*

"Excellently illustrated from the first page to the last by original drawings and photographs most carefully taken."—*Westminster Gazette.*

"Combines the best scientific and artistic information."—*Connoisseur.*

"A book which we can unhesitatingly recommend to the art student, because it is written by men who are thoroughly at home in the subject treated of, and who, moreover, have been mindful not to encumber their exposition with unnecessary minutiæ."—*Studio.*

VOL. III.

Modelling and Sculpture

BY

ALBERT TOFT, A.R.C.A., M.S.B.S.

Profusely Illustrated with Photographs and Drawings

Square extra crown 8vo., *6s. net. With 119 Illustrations*

"The details are very clearly set out, and the instruction throughout is of a thoroughly practical kind."—*Nottingham Guardian.*

"A model of clearness. A book that should be found most attractive to all art lovers, as well as invaluable to students of the processes described therein."—*School Guardian.*

"Will be exceedingly useful and even indispensable to all who wish to learn the art of sculpture in its many branches. The book will also appeal to those who have no intention of learning the art, but wish to know something about it. Mr. Toft writes very clearly."—*Field.*

"Written in a most interesting manner, beautifully printed on excellent paper, and illustrated as Messrs. Seeley know how to illustrate."—*Glasgow Citizen.*

"Will be found an invaluable aid to the student. . . . Takes the student step by step through the various technical processes, the text being supplemented by over a hundred excellent illustrations."—*Studio.*

LONDON: SEELEY & CO., LIMITED, 38 GREAT RUSSELL STREET, W.C.

THE SCIENCE OF TO-DAY SERIES

With many Illustrations. Extra Crown 8vo. 5s. net.

AERIAL NAVIGATION OF TO-DAY. A Popular Account of the Evolution of Aeronautics. By CHARLES C. TURNER.

"If ever the publication of a book was well timed, surely it is the case with this book on aviation. . . . Of the technical chapters we need only say that they are so simply written as to present no grave difficulties to the beginner who is equipped with an average education."—*Globe.*

BOTANY OF TO-DAY. A Popular Account of the Evolution of Modern Botany. By Prof. G. F. SCOTT-ELLIOT, M.A., B.Sc., Author of "The Romance of Plant Life," *&c. &c.*

"This most entertaining and instructive book. It is the fruit of wide reading and much patient industry."—*Globe.*

SCIENTIFIC IDEAS OF TO-DAY. A Popular Account, in Non-technical Language, of the Nature of Matter, Electricity, Light, Heat, Electrons, *&c. &c.* By CHARLES R. GIBSON, F.R.S.E., Author of "Electricity of To-Day," *&c.*

"As a knowledgeable writer, gifted with the power of imparting what he knows in a manner intelligible to all, Mr. C. R. Gibson has established a well-deserved reputation."—*Field.*

ASTRONOMY OF TO-DAY. A Popular Introduction in Non-technical Language. By CECIL G. DOLMAGE, LL.D., F.R.A.S. With frontispiece in colours, & 45 other illustrations.

"A lucid exposition much helped by abundant illustrations."—*The Times.*

"From cover to cover the book is readable, and every word is intelligible to the layman. Dr. Dolmage displays literary powers of a very high order. Those who read it without any previous knowledge of astronomy will find that a new interest has been added to their lives, and that in a matter of 350 pages they have gained a true conception of the meaning of astronomy."—*The Standard.*

ELECTRICITY OF TO-DAY. Its Work and Mysteries Explained. By CHARLES R. GIBSON, F.R.S.E.

"Mr. Gibson has given us one of the best examples of popular scientific exposition that we remember seeing. His aim has been to produce an account of the chief modern applications of electricity without using technical language or making any statements which are beyond the comprehension of any reader of ordinary intelligence. In this he has succeeded to admiration, and his book may be strongly commended to all who wish to realise what electricity means and does in our daily life."—*The Tribune.*

SEELEY, SERVICE & CO., LTD., 38 GREAT RUSSELL STREET, W.C.

A Catalogue of Books on Art History, and General Literature Published by Seeley & Co Ltd 38 Great Russell Street, London

Some of the Contents

Elzevir Library 5
Events of Our Own Times Series . . 6
Miniature Library of Devotion . . . 10
Miniature Portfolio Monographs . . 10
Portfolio Monographs 12
Science of To-Day Series 14
Seeley's Illustrated Pocket Library . . 14
Seeley's Standard Library 15
"Things Seen" Series 16

The Publishers will be pleased to post their complete Catalogue or their Illustrated Miniature Catalogue on receipt of a post-card

CATALOGUE OF BOOKS

Arranged alphabetically under the names of Authors and Series

ABBOTT, Rev. E. A., D.D.

Hints on Home Teaching. Crown 8vo, 3s.

How to Parse. An English Grammar. Fcap. 8vo, 3s. 6d.

How to Tell the Parts of Speech. An Introduction to English Grammar. Fcap. 8vo, 2s.

How to Write Clearly. Rules and Exercises on English Composition. 1s. 6d.

Latin Gate, The. A First Latin Translation Book. Crown 8vo, 3s. 6d.

Via Latina. A First Latin Grammar. Crown 8vo, 3s. 6d.

ABBOTT, Rev. E. A., and Sir J. R. SEELEY.

English Lessons for English People. Crown 8vo, 4s. 6d.

ADY, Mrs. *See* CARTWRIGHT, JULIA.

À KEMPIS, THOMAS.

Of the Imitation of Christ. With Illuminated Frontispiece and Title Page, and Illuminated Sub-Titles to each book. In white or blue cloth, with inset miniatures. Gilt top; crown 8vo, 6s. nett; also in vellum, 10s. 6d. nett.

"It may well be questioned whether the great work of Thomas à Kempis has ever been presented to better advantage."—*The Guardian.*

ALLDRIDGE, T. J.

A Transformed Colony. Sierra Leone as it was and as it is. With Sixty-six Illustrations and a Map. Demy 8vo, 16s. nett.

ANDERSON, Prof. W.

Japanese Wood Engravings. Coloured Illustrations. Super-royal 8vo, sewed, 2s. 6d. nett; half-linen, 3s. 6d. nett; also small 4to, cloth, 2s. nett; lambskin, 3s. nett.

ARMSTRONG, Sir WALTER.

The Art of Velazquez. Illustrated. Super-royal 8vo, 3s. 6d. nett.

The Life of Velazquez. Illustrated. Super-royal 8vo, 3s. 6d. nett.

Velazquez. A Study of his Life and Art. With Eight Copper Plates and many minor Illustrations. Super-royal 8vo, cloth, 9s. nett.

Thomas Gainsborough. Illustrated. Super-royal 8vo, half-linen, 3s. 6d. nett. Also new edition, small 4to, cloth, 2s. nett; leather, 3s. nett and 5s. nett.

The Peel Collection and the Dutch School of Painting. With many Illustrations. Super-royal 8vo, sewed, 5s. nett; cloth, 7s. nett.

W. Q. Orchardson. Super-royal 8vo, sewed, 2s. 6d.; half-linen, 3s. 6d. nett.

AUGUSTINE, S.

Confessions of S. Augustine. With Illuminated pages. In white or blue cloth, gilt top, crown 8vo, 6s. nett; also in vellum, 10s. 6d. nett.

BARING-GOULD, Rev. S.

Family Names and their Story. Demy 8vo, 7s. 6d. nett.

BEDFORD, Rev. W. K. R.

Malta and the Knights Hospitallers. Super-royal 8vo, sewed, 2s. 6d. nett; half-linen, 3s. 6d. nett.

BENHAM, Rev. Canon D. D., F.S.A.

The Tower of London. With Four Plates in Colours and many other Illustrations. Super-royal 8vo, sewed, 5s. nett; cloth, 7s. nett.

Mediæval London. With a Frontispiece in Photogravure, Four Plates in Colour, and many other Illustrations. Super-royal 8vo, sewed, 5s. nett; cloth, gilt top, 7s. nett.

Old St. Paul's Cathedral. With a Frontispiece in Photogravure, Four Plates printed in Colour, and many other Illustrations. Super-royal 8vo, sewed, 5s. nett, or cloth, gilt top, 7s. nett.

BICKERSTETH, Rev. E.

Family Prayers for Six Weeks. Crown 8vo, 3s. 6d.

A Companion to the Holy Communion. 32mo, cloth, 1s.

BINYON, LAURENCE.

Thomas Girtin: His Life and Works. An Essay. With Twenty-one Reproductions in Autotype. Imperial 4to, £2, 2s. nett.

Dutch Etchers of the Seventeenth Century. Illustrated. Super-royal 8vo, sewed, 2s. 6d.; half-linen, 3s. 6d. nett.

John Crome and John Sell Cotman. Illustrated. Super-royal 8vo, sewed, 3s. 6d. nett.

BIRCH, G. H.

London on Thames in Bygone Days. With Four Plates printed in Colour and many other Illustrations. Super-royal 8vo, sewed, 5s. nett; cloth, 7s. nett.

BRIDGES, Rev. C.

An Exposition of Psalm CXIX. Crown 8vo, 5s.

BUTCHER, E. L.

Things Seen in Egypt. With Fifty Illustrations. Small 4to, cloth, 2s. nett; lambskin, 3s. nett; velvet leather, in box, 5s. nett.

CAMERON, D. Y.

Six Etchings by D. Y. CAMERON and WILLIAM STRANG. Imperial 4to, 6s. nett.

CARTWRIGHT, JULIA.

Jules Bastien-Lepage. Super-royal 8vo, sewed, 2s. 6d.; cloth, 3s. 6d. nett.

Sacharissa. Some Account of Dorothy Sidney, Countess of Sunderland, her Family and Friends. With Five Portraits. Demy 8vo, 7s. 6d.

Madame: Memoirs of Henrietta, daughter of Charles I. and Duchess of Orleans. With Five Portraits. Demy 8vo, 7s. 6d.

Raphael in Rome. Illustrated. Super-royal 8vo, sewed, 2s. 6d.; half-linen, 3s. 6d. nett; also in small 4to, cloth, 2s. nett; leather, 3s. nett and 5s. nett.

The Early Work of Raphael. Illustrated. Super-royal 8vo, sewed 2s. 6d.; half-linen, 3s. 6d. Also new edition, revised, in small 4to, in cloth, 2s. nett; leather, 3s. nett.

Raphael: A Study of his Life and Work. With Eight Copper Plates and many other Illustrations. Super-royal 8vo, 7s. 6d. nett.

CESARESCO, The Countess MARTINENGO.

The Liberation of Italy. With Portraits on Copper. Crown 8vo, 5s.

CHITTY, J. R.

Things Seen in China. With Fifty Illustrations. Small 4to; cloth, 2s.; leather, 3s.; velvet leather in a box, 5s. nett.

CHORAL SERVICE-BOOK FOR PARISH CHURCHES, THE.

Compiled and Edited by J. W. ELLIOTT, Organist and Choirmaster of St. Mark's, Hamilton Terrace, London. With some Practical Counsels taken by permission from "Notes on the Church Service," by Bishop WALSHAM HOW.

A. Royal 8vo, sewed, 1s.; cloth, 1s. 6d.
B. 16mo, sewed, 6d.; cloth, 8d.

The following portions may be had separately:—

The Ferial and Festal Responses and the Litany. Arranged by J. W. ELLIOTT. Sewed, 4d.

The Communion Service, Kyrie, Credo, Sanctus, and Gloria in Excelsis. Set to Music by Dr. J. NAYLOR, Organist of York Minster. Sewed, 4d.

CHURCH, Sir ARTHUR H., F.R.S.

Josiah Wedgwood, Master Potter. With many Illustrations. Super-royal 8vo, sewed, 5s. nett; cloth, 7s. nett; also small 4to, cloth, 2s. nett; leather, 3s. and 5s. nett.

The Chemistry of Paints and Painting Third Edition. Crown 8vo, 6s.

CHURCH, Rev. A. J.

Nicias, and the Sicilian Expedition. Crown 8vo, 1s. 6d.

For other books by Professor CHURCH see Complete Catalogue.

CLARK, J. W., M.A.

Cambridge. With a coloured Frontispiece and many other Illustrations by A. BRUNET-DEBAINES and H. TOUSSAINT, &c. Extra crown 8vo, 6s.; also crown 8vo, cloth, 2s. nett; leather, 3s.; special leather, in box, 5s. nett.

CODY, Rev. H. A.

An Apostle of the North. The Biography of the late Bishop BOMPAS, First Bishop of Athabasca, and with an Introduction by the ARCHBISHOP of RUPERTSLAND. With 42 Illustrations. Demy 8vo, 7s. 6d. nett.

COLVIN, Sir AUCKLAND, K.C.S.I., K.C.M.G.

The Making of Modern Egypt. Fourth Edition. With Portraits and a Map. Demy 8vo, 18s. nett.

"Should take rank as the standard history of our labours in Egypt."—*The Spectator.*

CORNISH, C. J.

Animals at Work and Play: Their Activities and Emotions. With Twelve Illustrations. Second Edition. Crown 8vo, 6s.

Animals of To-day: Their Life and Conversation. With Illustrations from Photographs by C. REID of Wishaw. Crown 8vo, 6s.

The Isle of Wight. Illustrated. Super-royal 8vo, sewed, 2s. 6d. nett; half-linen, 3s. 6d. nett; also a new edition, small 4to, cloth, 2s.; leather, 3s.

Life at the Zoo. Notes and Traditions of the Regent's Park Gardens. Illustrated from Photographs by GAMBIER BOLTON. Fifth Edition. Crown 8vo, 6s.

The Naturalist on the Thames. With many Illustrations. Demy 8vo, 7s. 6d.

The New Forest. Super-royal 8vo, sewed, 2s. 6d. nett; half-linen, 3s. 6d. nett; also new edition, small 4to, cloth, 2s.; leather, 3s. nett; and special velvet leather, each copy in a box, 5s.

The New Forest and the Isle of Wight. With Eight Plates and many other Illustrations. Super-royal 8vo, 7s. 6d. nett.

Nights with an Old Gunner, and other Studies of Wild Life. With Sixteen Illustrations by LANCELOT SPEED, CHARLES WHYMPER, and from Photographs. Crown 8vo, 6s.

Wild England of To-day and the Wild Life in it. With Sixteen Illustrations from Drawings by LANCELOT SPEED, and from Photographs. Crown 8vo, 6s.

CUST, LIONEL.

The Engravings of Albert Dürer. Illustrated. Super-royal 8vo, half-linen, 3s. 6d. nett.

Paintings and Drawings of Albert Dürer. Illustrated. Super-royal 8vo, sewed, 3s. 6d. nett.

Albrecht Dürer. A Study of his Life and Work. With Eight Copper Plates and many other Illustrations. Super-royal 8vo, 7s. 6d.

DALE, J. M.

The Clergyman's Legal Handbook and Churchwarden's Guide. Seventh Edition. Revised and brought up to date by J. S. Risley. 7s. 6d.

DAVENPORT, CYRIL.

Cameos. With examples in Colour and many other Illustrations. Super-royal 8vo, sewed, 5s. nett; cloth, 7s. nett.

Royal English Bookbindings. With Coloured Plates and many other Illustrations. Super-royal 8vo, sewed, 3s. 6d.; cloth, 4s. 6d.

DAVIES, RANDALL, F.S.A.

English Society of the Eighteenth Century in Contemporary Art. With Four Coloured and many other Illustrations. Super royal 8vo, sewed, 5s. nett; cloth, 7s. nett.

DAWSON, Rev. E. C.

The Life of Bishop Hannington. Crown 8vo, paper boards, 2s. 6d.; or with Map and Illustrations, cloth, 3s. 6d.

DE LA BERE, K. BAGHOT.

The New Poultry Guide for British Farmers and Others. Showing the one and only way of making Farm Poultry a rent-paying industry. 1s.

DESTRÉE, O. G.

The Renaissance of Sculpture in Belgium. Illustrated. Super-royal 8vo, sewed, 2s. 6d. nett; half-linen, 3s. 6d. nett.

DOLMAGE, CECIL G., M.A., D.C.L., LL.D., F.R.A.S.

Astronomy of To-Day. A popular account in non-technical language. With Forty-six Illustrations and Diagrams. Extra crown 8vo, 5s. nett.

EARDLEY, WILMOT, Rear-Admiral S.

Our Fleet To-day and its Development during the last Half Century. With many Illustrations. Crown 8vo, 5s.

ELZEVIR LIBRARY, THE.

Selections from the choicest English Writers. Exquisitely Illustrated, with Frontispiece and Title-page in Colours by H. M. Brock, and many other Illustrations. Half bound in cloth, gilt top, 1s. 6d. nett; full leather, 2s. nett; velvet leather, gilt edges, in a box, 3s. nett.

Volume I. Fancy & Humour of Charles Lamb.
,, II. Wit & Imagination of Benjamin Disraeli.
,, III. Vignettes from Oliver Goldsmith.
,, IV. Wit & Sagacity of Dr. Johnson.
,, V. Insight and Imagination of John Ruskin.
,, VI. Vignettes of London Life from Dickens.
,, VII. XVIIIth Century Vignettes from Thackeray.
,, VIII. Vignettes of Country Life from Charles Dickens.
,, IX. Wisdom and Humour of Thomas Carlyle.

"Decidedly natty and original in get-up."—*The Saturday Review.*

EVENTS OF OUR OWN TIMES

Crown 8vo. With Illustrations, 5s. each.

The War in the Crimea. By General Sir E. HAMLEY, K.C.B. With Copper Plates and other Illustrations. 5s.

The Indian Mutiny. By Colonel MALLESON, C.S.I. With Copper Plates and other Illustrations. 5s.

The Afghan Wars, 1839-42, and 1878-80. By ARCHIBALD FORBES. With Portraits and Plans. 5s.

Our Fleet To-Day and its Development during the last Half Century. By Rear-Admiral S. EARDLEY WILMOT. With many Illustrations. 5s.

The Refounding of the German Empire. By Colonel MALLESON, C.S.I. With Portrait and Plans. 5s.

The Liberation of Italy. By the Countess MARTINENGO CESARESCO. With Portraits on Copper. 5s.

Great Britain in Modern Africa. By EDGAR SANDERSON, M.A. With Portraits and a Map. 5s.

The War in the Peninsula. By A. INNES SHAND. With Portraits and Plans. 5s.

FERRAR, NICHOLAS.

The Story Books of Little Gidding: Being the Religious Dialogues recited in the Great Room at Little Gidding Hall, 1631–2. From the Original Manuscript of NICHOLAS FERRAR. With an Introduction by E. CRUWYS SHARLAND, and several Illustrations. Crown 8vo, 6s.

FLETCHER, W. Y.

Bookbinding in England and France. Seventeen Coloured Plates and many other Illustrations. Super-royal 8vo, 7s. 6d. nett.

Bookbinding in France. Coloured Plates. Super-royal, sewed, 2s. 6d. nett; half-linen, 3s. 6d. nett.

FORBES, ARCHIBALD.

The Afghan Wars of 1839-1842 and 1878-1880. With Four Portraits on Copper, and Maps and Plans. Crown 8vo, 5s.

FROBENIUS, LEO.

The Childhood of Man. A Popular Account of the Lives and Thoughts of Primitive Races. Translated by Prof. A. H. KEANE, LL.D. With 416 Illustrations. Demy 8vo, 16s. nett.

FRY, ROGER.

Discourses Delivered to the Students of the Royal Academy by Sir Joshua Reynolds. With an Introduction and Notes by ROGER FRY. With Thirty-three Illustrations. Square Crown 8vo 7s. 6d. nett.

GARDNER, J. STARKIE.

Armour in England. With Eight Coloured Plates and many other Illustrations. Super-royal 8vo, sewed, 3s. 6d. nett.

Foreign Armour in England. With Eight Coloured Plates and many other Illustrations. Super-royal 8vo, sewed, 3s. 6d. nett.

Armour in England. With Sixteen Coloured Plates and many other Illustrations. The two parts in one volume. Super-royal 8vo, cloth, gilt top, 9s. nett.

GARNETT, R., LL.D.

Richmond on Thames. Illustrated. Super-royal 8vo, sewed, 3s. 6d. nett.

GIBERNE, AGNES.

Beside the Waters of Comfort. Crown 8vo, 3s. 6d.

GIBSON, CHARLES R., A.I.E.E.

Electricity of To-Day. Its Works and Mysteries described in non-technical language. With 30 Illustrations. Extra crown 8vo, 5s. nett.

"One of the best examples of popular scientific exposition we remember seeing."—*The Tribune.*

Scientific Ideas of To-day. A Popular Account in non-technical language of the Nature of Matter, Electricity, Light, Heat, &c., &c. With 25 Illustrations. Extra crown 8vo, 5s. nett.

How Telegraphs and Telephones Work. With many Illustrations. Crown 8vo, 1s. 6d. nett.

GODLEY, A. D.

Socrates and Athenian Society in his Day. Crown 8vo, 4s. 6d.

Aspects of Modern Oxford. With many Illustrations. Crown 8vo, cloth, 2s. nett; lambskin, 3s. nett; velvet leather, in box, 5s. nett.

GOLDEN RECITER. (*See* JAMES, Prof. CAIRNS.)

GRAHAME, GEORGE.

Claude Lorrain. Illustrated. Super-royal 8vo, 2s. 6d. nett; half-linen, 3s. 6d. nett.

GRIFFITH, M. E. HUME.

Behind the Veil in Persia and Turkish Arabia. An Account of an Englishwoman's Eight Years' Residence amongst the Women of the East. With 37 Illustrations and a Map. Demy 8vo, 16s. nett.

GRINDON, LEO.

Lancashire. Brief Historical and Descriptive Notes. With many Illustrations. Crown 8vo, 6s.

HADOW, W. H.

A Croatian Composer. Notes toward the Study of Joseph Haydn. Crown 8vo, 2s. 6d. nett.

Studies in Modern Music. First Series. Berlioz, Schumann, Wagner. With an Essay on Music and Musical Criticism. With Five Portraits. Crown 8vo, 7s. 6d.

Studies in Modern Music. Second Series. Chopin, Dvoràk, Brahms. With an Essay on Musical Form. With Four Portraits. Crown 8vo, 7s. 6d.

HAMERTON, Mrs.

Philip Gilbert Hamerton. Autobiography (1834–1858), and Memoir by his Wife (1858–1894). With a Portrait. Demy 8vo. 16s.

HAMERTON, P. G.

The Etchings of Rembrandt, and Dutch Etchers of the Seventeenth Century. By P. G. HAMERTON and LAURENCE BINYON. With Eight Copper Plates and many other Illustrations. Super-royal 8vo, 7s. 6d. nett.

Imagination in Landscape Painting. With many Illustrations. Cr. 8vo, 6s.

The Mount. Narrative of a Visit to the Site of a Gaulish City on Mount Beuvray. With a Description of the neighbouring City of Autun. Crown 8vo, 3s. 6d.

Round my House. Notes on Rural Life in Peace and War. Crown 8vo, with Illustrations, 2s. 6d. nett. Cheaper edition, 2s. nett.

Paris. Illustrated. New edition. Cloth, 2s. nett; leather 3s. nett in special leather, full gilt, in box, 5s. nett.

HAMLEY, Gen. Sir E.

The War in the Crimea. With Copper Plates and other Illustrations. Crown 8vo, 5s.
Cheap Edition, paper cover. Demy 8vo, 6d. nett.

HEATON, Mrs. C.

Life of Albert Dürer. With Sixteen Illustrations. 8vo, 10s. 6d.

HENDERSON, Major PERCY E.

A British Officer in the Balkans. Through Dalmatia, Montenegro, Turkey in Austria, Magyarland, Bosnia and Herzegovina. With 50 Illustrations and a Map. Gilt top. Demy 8vo, 16s. nett.

HERBERT, GEORGE.

The Temple. Sacred Poems and Ejaculations. The Text reprinted from the First Edition. With Seventy-six Illustrations after ALBERT DÜRER, HOLBEIN, and other Masters. Crown 8vo, cloth, 2s. nett; leather, 3s.; and in velvet leather in box, 5s. nett.

HOLLAND, CLIVE.

Things Seen in Japan. With Fifty beautiful illustrations of Japanese life in Town and Country. Small 4to, cloth, 2s. nett; leather, 3s. nett; in box, in velvet leather, 5s. nett.

HOW, W. W.

Hannibal, and the Great War between Rome and Carthage. 2s.

HUSON, T.

Round about Helvellyn. Twenty-four Plates in Etching and Aquatint. Imperial 4to, 21s. nett. Large paper copies (50 only), £2, 12s. 6d. nett.

HUTCHINSON, Rev. H. N.

The Story of the Hills. A Popular Account of Mountains and How They were Made. With many Illustrations. Crown 8vo, 5s.

HUTTON, C. A.

Greek Terracotta Statuettes. With a Preface by A. S. MURRAY, LL.D. With Seventeen Examples printed in Colour and Thirty-six printed in Monochrome. 5s. nett; or cloth, 7s. nett.

JAMES, CAIRNS.

The Golden Reciter. With an Introduction by CAIRNS JAMES, Professor of Elocution at the Royal Academy of Music, &c. With Selections from Rudyard Kipling, Thomas Hardy, R. L. Stevenson, Seton Merriman, H. G. Wells, Christina Rossetti, Anthony Hope, Austin Dobson, Maurice Hewlett, Conan Doyle, &c. &c. Extra crown 8vo, 704 pp. Cloth, 3s. 6d., and thin paper edition in cloth with gilt edges, 5s.

"A more admirable book of its kind could not well be desired."—*Liverpool Courier.*

The Golden Humorous Reciter. Edited, and with a Practical Introduction, by CAIRNS JAMES, Professor of Elocution at the Royal College of Music and the Guildhall School of Music. A volume of Recitations and Readings selected from the writings of F. Anstey, J. M. Barrie, S. R. Crockett, Jerome K. Jerome, Barry Pain, A. W. Pinero, Owen Seaman, G. B. Shaw, &c. &c. Extra crown 8vo, over 700 pages, cloth, 3s. 6d.; also a thin paper edition, with gilt edges, 5s.

JOY, BEDFORD.

A Synopsis of Roman History. Crown 8vo, 2s.

KEANE, Prof. A. H. (*See* FROBENIUS.)

KERR, RICHARD.

Wireless Telegraphy. Popularly Explained. With Preface by Sir W. H. PREECE, K.C.B., F.R.S., and many Illustrations. Sixth Edition, Revised. Fcap. 8vo, sewed, 1s.; cloth, 1s. 6d.

LANG, ANDREW.

Oxford. New Edition. With 50 Illustrations by J. H. LORIMER, R.S.A., T. HAMILTON CRAWFORD, R.S.W., J. PENNELL, A. BRUNET-DEBAINES, A. TOUSSAINT, and R. KENT THOMAS. Extra crown 8vo, 6s. Also Pocket Edition, 2s. nett; leather, 3s. nett. Special yapp leather, full gilt, in box, 5s. nett.

LEE, SIDNEY.

Stratford-on-Avon. From the Earliest Times to the Death of Shakespeare. New revised edition, with additional Illustrations. Extra crown 8vo, 6s. Pocket Edition, 2s. nett; leather, 3s. nett; and in special yapp leather, full gilt, in box, 5s. nett.

LEFROY, W. CHAMBERS.

The Ruined Abbeys of Yorkshire. With many Illustrations by A. BRUNET-DEBAINES and H. TOUSSAINT. Crown 8vo, cloth, 2s. nett; leather, 3s. nett and 5s. nett.

LEGROS, ALPHONSE.

Six Etchings by Alphonse Legros. With a Biographical Note. Imperial 4to, 6s. nett.

LEYLAND, JOHN.

The Peak of Derbyshire. With Map, Etchings, and other Illustrations by HERBERT RAILTON and ALFRED DAWSON. New Edition, Crown 8vo, cloth, 2s.; leather, 3s.; velvet leather, in a box, 5s. nett.

The Yorkshire Coast and the Cleveland Hills and Dales. With Etchings and other Illustrations. Crown 8vo, 7s. 6d.

LOFTIE, Rev. W. J.

The Inns of Court and Chancery. With many Illustrations, chiefly by HERBERT RAILTON. Crown 8vo, cloth, 2s. nett; leather, 3s. nett and 5s. nett.

Westminster Abbey. With Seventy-four Illustrations, chiefly by HERBERT RAILTON. Large crown 8vo, 7s. 6d.

Whitehall. With many Illustrations. Super-royal 8vo, sewed, 2s. 6d. nett; half-linen, 3s. 6d. nett.

MACKENZIE, Rev. W. B.

Married Life and the Dwellings of the Righteous. 3s. 6d.; white silk, 7s. 6d.

MALLESON, Colonel G. B., C.S.I.

The Indian Mutiny. With Copper Plates and other Illustrations. Crown 8vo, 5s.

The Refounding of the German Empire. With Portrait and Plans. Crown 8vo, 5s.

McCARTHY, JUSTIN.

Charing Cross to St. Paul's. Illustrated by J. PENNELL. Crown 8vo, 6s.

Seeley & Co Limited

MINIATURE LIBRARY OF DEVOTION

Little Volumes of Short Extracts from the Christian Fathers. With Decorative Title-page and Photogravure Frontispiece. 32mo, cloth extra, each 1s. nett; leather, each 1s. 6d. nett. Also Three Volumes in leather in case, 4s. 6d. nett. Also bound in white vellum with gilt edges, each volume in a box, 2s. 6d. nett.

1. Saint Augustine.
2. Jeremy Taylor.
3. Saint Chrysostom.
4. Bishop Andrewes.
5. John Keble.
6. Thomas à Kempis.
7. Canon Liddon.
8. Fénelon.
9. William Law.

MINIATURE PORTFOLIO MONOGRAPHS

A New Edition in 16mo. Most of the Volumes have been carefully revised by the Authors. Each Volume profusely Illustrated. Cloth, 2s. nett; leather, 3s. nett; velvet leather, in box, 5s. nett.

Peter Paul Rubens. By R. A. M. STEVENSON.

Japanese Wood Engravings. By Professor W. ANDERSON.

Josiah Wedgwood. By A. H. CHURCH, F.R.S., Professor of Chemistry, Royal Academy of Arts. New & Revised Edition.

D. G. Rossetti. By F. G. STEPHENS, One of the Seven Members of the Pre-Raphaelite Brotherhood.

The Early Work of Raphael. By JULIA CARTWRIGHT (Mrs. Ady).

Fair Women in Painting and Poetry. By WILLIAM SHARP (Fiona Macleod).

Antoine Watteau. By CLAUDE PHILLIPS, Keeper of the Wallace Collection.

Raphael in Rome. By JULIA CARTWRIGHT (Mrs. Ady).

The New Forest. By C. J. CORNISH, Author of "Life of the Zoo," &c.

The Isle of Wight. By C. J. CORNISH.

Gainsborough. By Sir WALTER ARMSTRONG, Keeper of the National Gallery of Ireland.

MITFORD, MARY RUSSELL.

Country Stories. With 68 Illustrations by GEORGE MORROW. Crown 8vo, cloth, gilt top, 2s. nett; also in leather, 3s. nett; and in special leather yapp, full gilt in box, 5s. nett.

MONKHOUSE, W. COSMO.

The Earlier English Water-Colour Painters. With many Illustrations. Crown 8vo, 6s.

MORIARTY, G. P.

Dean Swift. His Life and Writings. Cheaper Edition, with Two Portraits on Copper. 3s. 6d.

MOULE, Archdeacon A. E.

New China and Old. Notes on the Country and People made during a Residence of Thirty Years. With Thirty Illustrations. New Edition, Revised. Crown 8vo, 5s.

MOULE, Right Rev. H. C. G., D.D. (Bishop of Durham).

The Sacred Seasons. Readings for the Sundays and Holy Days of the Christian Year. With text printed in red and black throughout, and illuminated with specially drawn initial letters and other ornaments, and with twelve illuminated pages printed in three colours and gold after illuminations in manuscripts at the British Museum. Extra crown 8vo, 6s. nett; also white cloth, in box, 7s. 6d. nett.

MOULE, Right Rev. H. C. G., D.D.—*Continued.*

At the Holy Communion. Helps for Preparation and Reception. Cloth, 1s.; leather, 2s. nett; calf, 4s. 6d.

Christ's Witness to the Life to Come. Crown 8vo, 3s. 6d.

Cross and the Spirit, The. Studies in the Epistle to the Galatians. Foolscap 8vo, 1s. 6d.

Grace and Godliness. Studies in the Epistle to the Ephesians. Crown 8vo, 2s. 6d.

In the House of the Pilgrimage. Hymns and Sacred Songs. 2s. 6d.

Imitations and Translations. Crown 8vo, 2s. 6d. nett.

Jesus and the Resurrection. Expository Studies on St. John xx. and xxi. Third Edition, 2s. 6d.

Lord's Supper, The. By BISHOP RIDLEY. Edited with Notes and a Life by the BISHOP OF DURHAM. Crown 8vo, 5s.

Our Prayer Book. Short Chapters on the Book of Common Prayer. 16mo, 1s.; leather, 2s. nett.

Pledges of His Love, The. Thoughts on the Holy Communion. 16mo, 1s.; leather, 2s. nett.

Prayers for the Home. A Month's Cycle of Morning and Evening Family Worship, with some Occasional Prayers. Crown 8vo, 3s. 6d.

Prayers and Promises. Messages from the Holy Scriptures. 16mo, 1s.; leather, 2s. nett; calf, 4s. 6d.

The Secret of the Presence, and other Sermons. Crown 8vo, 3s. 6d.

Temptation and Escape. Short Chapters for Beginners in the Christian Life. 16mo, 1s.; leather, 2s. nett.

Thoughts on Christian Sanctity. 16mo, cloth, 1s.; leather, 2s. nett.

Thoughts on Secret Prayer. 16mo, cloth, 1s.; leather, 2s. nett; calf, 4s. 6d.

Thoughts on the Spiritual Life. 16mo, cloth, 1s.; leather, 2s. nett.

Thoughts on Union with Christ. 16mo, cloth, 1s.; leather, 2s. nett.

MURRAY, A. S., LL.D.

Greek Bronzes. With Four Copper Plates and many other Illustrations. Super-royal 8vo, sewed, 3s. 6d. nett; cloth, 4s. 6d. nett.

Greek Bronzes, by Dr. MURRAY, and **Greek Terracotta Statuettes,** by C. A. HUTTON. With Four Photogravures, Eight Coloured Plates, and Seventy-seven other Illustrations. In one Volume. Super-royal 8vo, cloth, 10s. 6d. nett.

NETTLESHIP, J. T.

Morland, George. With Six Copper Plates and Thirty other Illustrations. Super-royal 8vo, sewed, 5s. nett; cloth, 6s. nett.

PAGE, J. Ll. WARDEN.

Dartmoor, An Exploration of. With Map, Etchings, and other Illustrations. Cheap Edition, 3s. 6d.

Exmoor, An Exploration of. With Maps, Etchings, and other Illustrations. Cheap Edition, 3s. 6d.

PENNELL, J. and E.

A Canterbury Pilgrimage. Pott 4to, cloth, gilt edges, 2s. 6d.

PENNELL, T. L., M.D., B.Sc., F.R.C.S.

Among the Wild Tribes of the Afghan Frontier. A Record of Sixteen Years' Close Intercourse with the Natives of the Indian Marches. With an Introduction by Field-Marshal LORD ROBERTS, V.C. Demy 8vo. With 37 Illustrations and a Map. 16s. nett.

PHILLIPS, CLAUDE.

The Earlier Work of Titian. With many Illustrations. Super-royal 8vo, sewed, 3s. 6d. nett; cloth, 4s. 6d. nett.

The Later Work of Titian. With many Illustrations. Super-royal 8vo, sewed, 3s. 6d. nett; cloth, 4s. 6d. nett.

Titian, a Study of his Life and Work. With Eight Copper Plates and many other Illustrations. Super-royal 8vo, 9s. nett.

The Picture Gallery of Charles I. With many Illustrations. Super-royal 8vo, sewed, 3s. 6d. nett; cloth, 4s. 6d. nett.

Frederick Walker. Sup.-roy. 8vo, sewed, 2s. 6d. nett; half-linen, 3s. 6d. nett.

Antoine Watteau. Sup.-roy. 8vo, sewed, 2s. 6d. nett; half-linen, 3s. 6d. nett; also small 4to, cloth, 2s. nett; and 3s. and 5s. nett in leather.

POLLARD, A. W.

Italian Book Illustrations. Super-royal 8vo, sewed, 2s. 6d. nett; half-linen, 3s. 6d. nett.

PORTFOLIO MONOGRAPHS ON ARTISTIC SUBJECTS

"A triumph of magnificent illustration and masterly editing."—*The Times.*

Many of the Volumes are issued in two forms and at various nett prices. Where two prices are given, the first is that of the paper cover edition; the second that of the cloth. When only one price is given, the Volume is bound in paper only.

ANDERSON, Prof. W.

Japanese Wood Engravings. 2s. 6d. and 3s. 6d.

ARMSTRONG, Sir WALTER.

The Art of Velazquez. 3s. 6d.

The Life of Velazquez. 3s. 6d.

The Peel Collection and the Dutch School of Painting. 5s. and 7s.

Thomas Gainsborough. Half-linen, 3s. 6d.

W. Q. Orchardson. 2s. 6d. and 3s. 6d.

BEDFORD, W. K. R.

Malta. 2s. 6d. and 3s. 6d.

BENHAM, Canon, and CHARLES WELCH, F.S.A.

Mediæval London. 5s. and 7s.

The Tower of London. 5s. and 7s.

BENHAM, Canon.

Old St. Paul's Cathedral. 5s. and 7s.

BINYON, LAURENCE.

Dutch Etchers of XVIIth Century. 2s. 6d. and 3s. 6d.

John Crome and J. S. Cotman. 3s. 6d.

BIRCH, G. H., F.S.A.

London on Thames 5s. and 7s.

CARTWRIGHT, JULIA (Mrs. ADY).

Jules Bastien-Lepage. 2s. 6d. and 3s. 6d.

The Early Work of Raphael. 2s. 6d. and 3s. 6d.

Raphael in Rome. 2s. 6d. and 3s. 6d.

CHURCH, A. H., F.R.S.
Josiah Wedgwood. 5s. and 7s.

CORNISH, C. J.
The Isle of Wight. 2s. 6d. and 3s. 6d.
The New Forest. 2s. 6d. and 3s. 6d.

CUST, LIONEL, F.S.A.
The Engravings of Albert Dürer. 2s. 6d. and 3s. 6d.
The Paintings and Drawings of Albert Dürer. 3s. 6d.

DAVENPORT, CYRIL, F.S.A.
Royal English Bookbindings. 3s. 6d. and 4s. 6d.
Cameos. 5s. and 7s.

DAVIES, RANDALL, F.S.A.
English Society of the Eighteenth Century in Contemporary Art.

DESTRÉE, O. G.
The Renaissance of Sculpture in Belgium. 2s 6d. and 3s. 6d.

FLETCHER, W. Y.
Bookbinding in France. 2s. 6d. and 3s. 6d.

GARDNER, J. STARKIE.
Armour in England. 3s. 6d.
Foreign Armour in England. 3s. 6d.

GARNETT, RICHARD, C.B., LL.D.
Richmond on Thames. 3s. 6d. and 4s. 6d.

GRAHAME, GEORGE.
Claude Lorrain. 2s. 6d. and 3s. 6d.

HAMERTON, P. G.
The Etchings of Rembrandt. 2s. 6d. and 3s. 6d.

HUTTON, C. A.
Greek Terracotta Statuettes. 5s. and 7s.

LOFTIE, W. J.
Whitehall. 2s. 6d. and 3s. 6d.

MURRAY, A. S., LL.D.
Greek Bronzes. 3s. 6d. and 4s. 6d.

NETTLESHIP, J. T.
George Morland. 5s. and 6s.

PHILLIPS, CLAUDE.
Frederick Walker. 2s. 6d. and 3s. 6d.
Antoine Watteau. 2s. 6d. and 3s. 6d.
The Picture Gallery of Charles I. 3s. 6d.
The Earlier Work of Titian. 3s. 6d.
The Later Work of Titian. 3s. 6d.

POLLARD, ALFRED W.
Italian Book Illustrations. 2s. 6d. and 3s. 6d.

PRIOR, E. S., F.S.A.
The Cathedral Builders of England. 5s. and 7s.

SHARP, WILLIAM.
Fair Women. 2s. 6d. and 3s. 6d.

STEPHENS, F. G.
Dante Gabriel Rossetti. 2s. 6d.

STEVENSON, R. A. M.
Peter Paul Rubens. 3s. 6d.

WAERN, CECILIA.
John La Farge. 3s. 6d.
WEALE, W. H. JAMES.
Gerard David, Painter and Illuminator. 2s. 6d. and 3s. 6d.

PRIOR, E. S., F.S.A.
The Cathedral Builders of England. Illustrated. Super-royal 8vo, sewed, 5s. nett; cloth, extra gilt top, 7s. nett.
QUILLER COUCH, A. T.
The Pilgrims' Way. A Little Scrip for Travellers. In Prose and Verse. With end papers in colour, and gilt top. Fcap. 8vo, cloth, 3s. 6d. nett; on thin paper, leather, 5s. nett.
REYNOLDS, Sir JOSHUA.
Discourses Delivered to the Students of the Royal Academy. With an Introduction and Notes by ROGER FRY. With Thirty-Three Illustrations. Extra Crown 8vo, 7s. 6d. nett.
ROCHE, C. E.
Things Seen in Holland. With Fifty Illustrations. Small 4to, cloth, 2s. nett; lambskin, 3s. nett; velvet leather, 5s. nett.
ROPES, A. R.
Lady Mary Wortley Montagu. With Eight Illustrations. Crown 8vo, cloth, 2s. 6d. nett.
RUSSELL, W. CLARK.
The British Seas. With upwards of Fifty Illustrations. Crown 8vo, cloth, 2s.; leather, 3s.; special yapp leather in box, 5s. nett.
SANDERSON, E.
Great Britain in Modern Africa. With Four Portraits on Copper and a Map. Crown 8vo, 5s.
SCOTT-ELLIOT, Professor G. F., M.A., B.Sc.
Botany of To-day. With Twenty-seven Illustrations. Large crown 8vo, 5s. nett.
STIGAND, Captain C. H.
Through the Unknown to Abyssinia. With Map and Forty Illustrations. Demy 8vo, 16s. nett.
SWANN, A. J.
Fighting the Slave-Hunter in Central Africa. A Record of Twenty-Six Years of Travel and Adventure Round the Great Lakes. With Map and Forty-Five Illustrations. Demy 8vo, 16s. nett.

SCIENCE OF TO-DAY SERIES

The volumes of this series give an attractive, lucid, yet at the same time scientifically accurate account of various subjects in non-technical language. Large crown 8vo, 5s. nett.

Aerial Navigation of To-day. By CHARLES C. TURNER.
Astronomy of To-Day. By C. G. DOLMAGE, M.A., LL.D., D.C.L., F.R.A.S.
Botany of To-day. By G. F. SCOTT-ELLIOT, M.A., B.Sc.
Electricity of To-Day. By CHARLES R. GIBSON, A.I.E.E.
Scientific Ideas of To-Day. By CHARLES R. GIBSON, A.I.E.E.

SEELEY'S ILLUSTRATED POCKET LIBRARY

Crown 8vo, cloth, gilt edge, 2s. nett; also in leather, 3s. nett; and yapp leather in box at 5s.

ADDISON and STEELE.
The Spectator in London. With Fifty-six Illustrations by RALPH CLEAVER, and Headpieces by W. A. ATKIN BERRY, CLOUGH BROMLEY, &c.

SEELEY'S ILLUSTRATED POCKET LIBRARY—*Continued.*

CLARK, J. W., Registrary of the University of Cambridge.
Cambridge. With many Illustrations.

GODLEY, A. D.
Aspects of Modern Oxford. With many Illustrations.

HAMERTON, P. G.
Paris. With many Illustrations.

HERBERT, GEORGE.
The Temple. Sacred Poems and Ejaculations. The Text reprinted from the first edition. With 76 Illustrations after DÜRER, HOLBEIN, and other Masters.

LANG, ANDREW.
Oxford. With 40 Illustrations by various artists.

LEE, SIDNEY.
Stratford-on-Avon. From the Earliest Times to the Death of Shakespeare. With 52 Illustrations by HERBERT RAILTON and E. HULL.

LEFROY, W. CHAMBERS.
The Ruined Abbeys of Yorkshire. With many Illustrations.

LEYLAND, JOHN.
The Peak of Derbyshire: its Scenery and Antiquities.

LOFTIE, W. J.
The Inns of Court. With 60 Illustrations.

MITFORD, MARY RUSSELL.
Country Stories. With 68 Illustrations by GEORGE MORROW.

RUSSELL, W. CLARK.
British Seas. With 50 Illustrations by J. C. HOOK, R.A., HAMILTON MACCALLUM, COLIN HUNTER, &c.

STEVENSON, R. L. Edinburgh. With many Illustrations by T. HAMILTON CRAWFORD, R.S.A. (This volume is only to be had in this series in leather, 5s. nett. For other editions of this book, see next page.)

THE STANDARD LIBRARY

Extra Crown 8vo, With many Illustrations. Price 2s. 6d. nett.

Lady Mary Wortley Montagu. By A. R. ROPES.
Mrs. Thrale. By L. B. SEELEY.
Round My House. By P. G. HAMERTON.
Fanny Burney & Her Friends. By L. B. SEELEY.

SEELEY, Sir J. R.
Goethe Reviewed after Sixty Years. With Portrait. Crown 8vo, 3s. 6d.
A Short History of Napoleon the First. With Portrait. Crown 8vo, 5s.

SEELEY, Sir J. R., and Dr. ABBOTT.
English Lessons for English People. Crown 8vo, 4s. 6d.

SEELEY, L. B.
Mrs. Thrale, afterwards Mrs. Piozzi. With Eight Illustrations. Crown 8vo, 2s. 6d nett.
Horace Walpole and his World. Extracts from his Letters. With Eight Copper Plates. Crown 8vo, 7s. 6d.
Fanny Burney and her Friends. With Eight Illustrations. Crown 8vo, 2s. 6d nett.

SHAND, A. INNES.
The War in the Peninsula. With Portraits and Plans. 5s.

SHARLAND, E. CRUWYS.

The Story Books of Little Gidding: Being the Religious Dialogues recited in the Great Room at Little Gidding Hall, 1631–2. With an Introduction by E. CRUWYS SHARLAND, and several Illustrations. Crown 8vo, 6s.

SHARP, WILLIAM.

Fair Women. Illustrated. Super-royal 8vo, sewed, 2s. 6d. nett; half-linen, 3s. 6d. nett. Also new edition, small 4to, cloth, 2s. nett; leather, 3s. nett.

SHIPLEY, M. E.

Daily Help for Daily Need. A Selection of Scripture Verses and Poetry for Every Day in the Year. Crown 8vo, 4s. 6d.

SOLOMON, SOLOMON J. R. A.

The Practice of Oil Painting and Drawing. With Eighty Illustrations. Extra crown 8vo, 6s. nett.

STEPHENS, F. G.

Rossetti, D. G. Super-royal 8vo, sewed, 2s. 6d. nett; also small 4to, cloth, 2s. nett; leather, 3s. nett; velvet leather, in a box, 5s. nett.

STEVENSON, R. L.

Edinburgh. Fcap. 8vo, with Frontispiece, gilt top, cloth, 2s. nett; leather, 3s. nett. Crown 8vo, Illustrated, cloth, 3s. 6d. Roxburgh, gilt top, 5s. Library Edition. Crown 8vo, buckram, dark blue, gilt top, Sixteen Full-page Illustrations, 6s. Presentation Edition. Extra crown 8vo, with Sixty-four Illustrations, 6s. nett; also People's Edition, demy 8vo, 6d. nett.

STEVENSON, R. A. M.

Rubens, Peter Paul. Illustrated. Super-royal 8vo, 3s. 6d. nett, sewed; also small 4to, cloth, 2s. nett; leather, 3s. nett and 5s. nett.

STRANG, WILLIAM.

Six Etchings. By D. Y. CAMERON and WILLIAM STRANG. Imperial 4to, 6s. nett.

"THINGS SEEN" SERIES

Each volume with 50 Illustrations. Small 4to, cloth, 2s.; leather, 3s.; and velvet leather, in a box, 5s. nett.

Things Seen in Japan. By CLIVE HOLLAND.
Things Seen in China. By J. R. CHITTY.
Things Seen in Egypt. By E. L. BUTCHER.
Things Seen in Holland. By C. E. ROCHE.

TOWNSHEND, Captain A. T.

A Military Consul in Turkey. With many Illustrations. Demy 8vo, 16s. nett.

TURNER, CHARLES C.

Aerial Navigation of To-day. With Seventy Illustrations and Diagrams. Extra crown 8vo, 5s. nett.

WACE, Very Rev. H., Dean of Canterbury.

The Sacrifice of Christ. Its Vital Reality and Efficacy. Cloth, 1s.

WAERN, C.

John La Farge. Illustrated. Super-royal 8vo, sewed, 3s. 6d. nett.

WEALE, W. H. JAMES.

Gerard David, Painter and Illuminator. Illustrated. Super-royal 8vo, sewed, 2s. 6d. nett; half-linen, 3s. 6d. nett.

WELCH, C., and Canon BENHAM.

Mediæval London. With a Frontispiece in Photogravure, Four Plates in Colour, and many other Illustrations. Super-royal 8vo, sewed, 5s. nett; cloth, gilt top, 7s. nett.

WELLDON, Bishop.

The Hope of Immortality. An Essay. Third Edition. Crown 8vo, 3s. 6d.

L 46 2 26

University of California, Los Angeles
L 006 211 079 6

UC SOUTHERN REGIONAL LIBRARY FACILITY
AA 001 290 007 2